UNCTAD/LDC/115
20 July 2001

ENGLISH ONLY

TRADE AND DEVELOPMENT BOARD

Fifth Meeting of Governmental Experts from
Land-locked and Transit Developing
Countries and Representatives of
Donor Countries and Financial and
Development Institutions
New York, 30 July - 3 August 2001

REVIEW OF PROGRESS IN THE DEVELOPMENT OF TRANSIT TRANSPORT SYSTEMS IN EASTERN AND SOUTHERN AFRICA

Report prepared by InfraAfrica (Pty) Ltd
UNCTAD consultant */

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INTRODUCTION

1. The geographical regions of Eastern and Southern Africa have three major economic groupings. These are:

- The East African Community (EAC);
- The Common Market for Eastern and Southern Africa (COMESA); and the
- Southern African Development Community (SADC).

2. All the three regional bodies and the respective countries they represent have a common objective, that of attaining faster economic growth with a view to reducing and, in the long term, eradicating poverty. However, in order to do so, they must increase trade, especially external trade. This demands that their exports must be competitive in the world market and that their imports, especially inputs to their productive sectors, must be obtained at the lowest possible prices. Efficient transport is critical to achieving these objectives.

3. Among the major contributors to the cost of inputs and consumer goods, as well as the price of traded goods, is the cost of transport. For Eastern and Southern Africa, this cost is still very high, with estimates in the region of four to five times of those in the developed countries and for some landlocked countries as high as between 30 – 40 per cent of the price of goods. It is obvious that, without a drastic reduction in transport costs, the objectives stated above of competitiveness, poverty alleviation and development will remain difficult to attain.

4. The importance of efficient transit transport systems for East and Southern Africa cannot be over-emphasized. Transportation and transaction costs are key determinants of the competitive and comparative advantages that impact on the economies of the countries of these regions. When these costs are high, as is the case for East and Southern Africa, they not only suppress international trade, but also impact adversely on the general economic competitiveness of these countries. This factor, in turn, frustrates the socio-economic growth and development of these regions.

5. There is sufficient evidence to suggest that low levels of intra-regional trade in Africa are explained less by such issues as tariff barriers and more by structural factors such as low incomes and weak transport and communications infrastructure. Professor Jeffrey Sachs of Harvard states that by being landlocked, economic growth of rates of landlocked countries are reduced by between 0.7% and 1.0%.[1] The Eastern and Southern Africa regions have ten landlocked countries, namely Uganda, Rwanda, Burundi and the Democratic Republic of the Congo (East Africa) and Botswana, Lesotho, Malawi, Swaziland, Zambia and Zimbabwe (Southern Africa).

6. The African Development Bank (AfDB), in its African Development Report 2000 states:

> "Domestic regional and international transport and communication costs are comparatively greater for African businesses than their international
>
> competitors, which has had the net effect of constraining economic growth. In seeking to globalize their economies, landlocked countries face

[1] The Limits of Convergence – Nature, Nurture and Growth – Jeffrey Sachs – The Economist, Issue: 14-20 June, 1997

substantial cost disadvantages that have constrained exports and increased the cost of essential imports."[2]

7. A recent report by the Organization for Economic Cooperation and Development (OECD) states that:

> "By reducing transaction costs and thus increasing the profitability and the productivity of investments, more efficient infrastructure facilities enhance economic growth and the quality of life....geography and location are key reasons for Africa's dismal economic performance. The vast distances and low population density make the cost of providing efficient transport prohibitive. Such inefficiencies – in terms of management, unreliability of communications, complicated customs and documentation procedures, and other unofficial costs related to lack of security and abuses – make conducting business very expensive. Regionalism and harmonised infrastructure policies are especially important for landlocked countries that have to rely on physical infrastructure provided by neighbours, whose policies they do not control."[3]

8. While efficient transport and reduced transport costs are important for all countries in the two regions, they are particularly important for land-locked countries. This means, therefore, that land-locked countries need special consideration in proposing measures to address the transit transport situation of East and Southern Africa.

I. OBJECTIVES AND SCOPE OF REPORT

9. Against the above background, UNCTAD has commissioned a review of the current transit situation in East and Southern Africa. In accordance with the terms of reference, the main objective of the assignment is to review the state of performance of transit transport systems and to propose measures to improve and foster strengthened transit collaboration in the Eastern and Southern African regions. This has involved:

(a) an inventory of the transit infrastructure facilities and services (rail, roads, ports, transit storage capacity and trans-shipment facilities as well as clearing and freight forwarding and transit insurance services); transport systems and facilities; (b) an assessment of the legal and administrative cooperative arrangements between the Eastern and Southern African land-locked countries and their neighbours to regulate transit operations; (c) identification of the operational constraints and bottlenecks and deficiencies within the transit system and actions taken to alleviate them. Preparation of proposals to improve the transit systems, including identification of priority areas for donor intervention and measures to strengthen transit cooperation in the Eastern and Southern African region.

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[2] African Development Report 2000 – Regional Integration in Africa – African Development Bank (AfDB)

[3] Regional Integration Experience in the Eastern African Region – Andrea Goldstein and Njuguna S. Ndung'u – Technical Papers No. 171, New Forms of Co-operation and Integration in Emerging Africa – Organisation for Economic Co-operation and Development (OECD) Development Centre

10. The primary focus of this report is on the land-locked countries of Eastern and Southern Africa as well as their maritime neighbours who serve these countries. The report covers the following countries:

East Africa - Burundi, Rwanda, Uganda and eastern Democratic Republic of Congo (land-locked countries)
Kenya, Tanzania (maritime countries)

Southern Africa - Botswana, Lesotho, Malawi, Swaziland, Zambia and Zimbabwe (land-locked countries)
Angola, Mozambique, Namibia and South Africa (maritime countries)

11. The report does not cover the island countries of Mauritius and Seychelles, although they are a part of Southern Africa.

II. APPROACH AND METHODOLOGY

A. Overall Approach

12. The approach adopted in carrying out the assignment involved the following key steps:

- Background research and analysis
- Consultative visits to selected countries
- Synthesis of findings
- Report writing
- Preparation of issues paper
- Preparation of final report

B. Methodology

1. Background Research and Analysis

13. Using InfraAfrica's own data and information sources, Internet sources and gathering of information through telephonic and e-mail inquiries with relevant stakeholders, the Study Team put together the initial framework of transit transport systems and facilities, including their performance.

2. Consultative Visits

14. Given the limited time available for the assignment and the fact that the two Study Team members already have considerable experience in the transit transport area, consultative visits were limited to selected countries and organizations, mostly for purposes of consultations, verification of data and collection of additional information. Consultative visits were undertaken as follows:

- Secretariat of the East African Community (EAC) in Arusha, Tanzania, as well as Dar-Es-Salaam

- Secretariat of the Common Market for Eastern and Southern Africa (COMESA) in Lusaka, Zambia; and

- The Technical Unit of the Southern Africa Transport and Communications Commission (SATCC) in Maputo, Mozambique.

3. Synthesis of Findings and Report Writing

15. Synthesis of findings and report writing was started in the field and completed at base in Gaborone. The writing of the report also benefited from the outcome of the SADC Transport Investment Forum held under the auspices of the Southern Africa Transport and Communications Commission (SATCC) on 24-26, April, 2001 in Windhoek, Namibia.

16. *Preparation of Issues Paper:* An "Issues Paper" summarising the main issues and recommendations was prepared and submitted on 23 April 2001.

17. *Preparation of Final Report:* The draft Final Report was finalised and submitted at the end of May 2001. Additional interviews were conducted to ensure that the recommendations put forward were feasible and realistic. This entailed more work than earlier anticipated

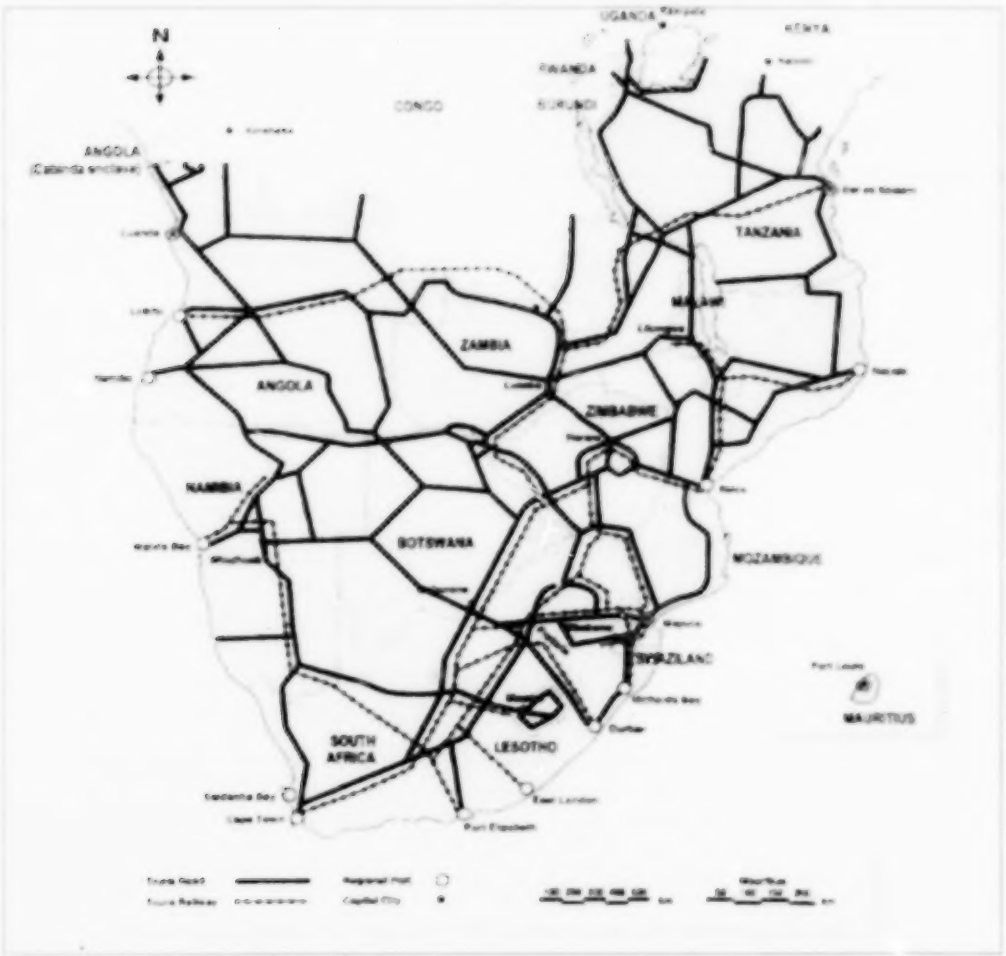
III. LAYOUT OF REPORT

18. The report is structured as follows: The first section is an Executive Summary of main issues and conclusions. This is followed by six major sections as follows:

Section 1: - Introduction
Section 2: - Inventory of Transit Transport Systems and Facilities
Section 3: - Factors Affecting Performance
Section 4: - Performance of Transit Transport Systems
Section 5: - Issues and Developments
Section 6: - New Initiatives and Approaches
Section 7: - Conclusions and Recommendations
Section 8: - Summary

IV. INVENTORY OF TRANSIT-TRANSPORT SYSTEMS AND FACILITIES

Existing Transport Corridors



Source: SATCC-TU InfraAfrica Consultants

19. In terms of availability of transit corridors, landlocked countries of Southern Africa have a wider choice of routing options than their East African counterparts. East Africa has two principal corridors, the Northern Corridor from the Kenyan port of Mombasa on to Uganda, Burundi, Rwanda and DRC and the Central Corridor, from the Tanzanian port of Dar-Es-Salaam serving the same countries. The TAZARA Corridor can be considered another corridor, as it has the potential to be an alternative route for Burundi, Rwanda and eastern DRC through the Zambian port of Mpulungu.

20. In contrast, Southern African land-locked countries have the option of using the corridors through the ports of Mozambique, Namibia and South Africa and, when the war situation in Angola improves, Angolan ports. There are over ten transit corridors, with the main ones being the seven from the Mozambican ports of Beira, Maputo and Nacala and the South African ports of Durban, Port Elizabeth and Cape Town, as well as the Namibian port of Walvis Bay.

Table 1
Main transit-transport corridors in East and Southern Africa

TRANSIT CORRIDOR		COUNTRIES SERVED	MODE OF TRANSPORT AND CONDITION	
Tanzania (Dar-Es-Salaam)	Central	Tanzania, Burundi, Rwanda, Uganda, Eastern D.R. Congo	Road/Rail/Lake	Poor/Fair
	TAZARA	Malawi, Zambia	Road/Rail/Lake	Fair
Kenya	Northern	Kenya, Burundi, Rwanda, Uganda, North-East DRC	Road/Rail/Lake	Poor/Fair
Mozambique	Beira	Mozambique, Malawi, Zimbabwe, Zambia	Road/Rail	Fair
	Maputo	Mozambique, Swaziland, South Africa, Zimbabwe	Road/Rail	Fair/Good
	Nacala	Mozambique, Malawi and Eastern Zambia	Rail	Fair
South Africa	Durban	Main North South Artery with links to Maputo, Beira, TAZARA and Mpulungu Corridors serving Zimbabwe, Zambia, Malawi and also Burundi, Rwanda, Democratic Republic of Congo (DRC), Tanzania, Kenya and Uganda	Road/Rail/Lake	Fair/Good
	Port Elizabeth	South Africa and parts of North-South Corridor	Road/Rail	Good
	Cape Town	South Africa and parts of North-South Corridor	Road/Rail	Good
	Richards Bay	South Africa, Swaziland	Road/Rail	Good
Angola	Namibe	Angola, Namibia	Road	Fair
	Lobito	Angola, DRC and Zambian Copperbelt	Rail	Non-operational Poor
	Luanda	Angola and Western DRC	Road/Rail	Partially operational Poor

Namibia (Walvis Bay)	Trans-Caprivi	Namibia, Zambia, Zimbabwe	Part Rail Road	Fair-Good
	Trans-Kalahari	Namibia, Botswana, South Africa	Part Rail Road	Good
Zambia	Mpulungu	Burundi, Rwanda and Eastern DRC	Road-Rail-Lake	Poor-Fair

Source: InfraAfrica Consultants

Transit-transport strategies

21. All the three regional groupings, EAC, COMESA and SADC, have as one of their principal objectives in transport, the improvement of transit transport systems and facilities as well their performance. The strategy and vision is presented below:

EAC: East African Community Development Strategy: 2001-2005 states that the "EAC Treaty emphasises co-operation in infrastructure to evolve co-ordinated, harmonized, and complementary transport and communication. Policies in this area should aim at improving the existing transport and communication links and establishing new ones as a means of furthering the physical cohesion of the Partner States and facilitating and promote the movement of traffic within the community.

.....

The strategy is to harmonize and simplify regulations, goods classification, procedure and documentation required for multimodal transport within the community."[4]

COMESA: The COMESA Vision and Strategy into the 21st Century states, "Facilitation of both road and air transport is aimed at ensuring more efficient movement of goods and people, thus not only enhancing intra-COMESA trade, but also maximising the use of existing infrastructure. Transport facilitation programs also aim to create stable, competitive and cost-efficient transit systems"[5]

SADC: The SADC Protocol on Transport, Communications and Meteorology, states as one of its strategic goals, "Integration of transport, communications and meteorology networks to be facilitated by the implementation of compatible policies, legislation, rules, standards and procedures; elimination or reduction of hindrances and impediments to the movement of persons, goods, equipment and services....the right of freedom of transit for persons and goods; the right of land-locked Member States to unimpeded access to and from the sea....the development of simplified and harmonized documentation which supports the movement of cargoes along the length of the logistical chain, including the use of a harmonized nomenclature."[6]

22. There is considerable overlap in the membership of the three economic groupings particularly between COMESA and SADC. Nine SADC countries are also members of COMESA (shown in **bold** in table 2). Tanzania is a special case belonging (until recently when the country pulled out of COMESA) to all the three organisations, EAC, COMESA and SADC. Tanzania now

[4] East African Community Development Strategy: 2001-2005

[5] COMESA Vision and Strategy into the 21st Century – COMESA Secretariat

[6] SADC Protocol on Transport, Communications and Meteorology – Southern African Development Community

belongs to two groupings, EAC and SADC. Unfortunately, the overlap in membership has also translated into overlap in activities. This has not always augured well for effective implementation and in particular optimal utilisation of scarce resources. Although attempts have been made in the past to get the organisations, particularly COMESA and SADC, to work together, in practice this has been difficult to achieve. Clearly, this is an area that requires continuous dialogue so as to reach an amicable solution.

Table 2
Membership of regional organisations

COMESA	EAC	SADC
Angola	Kenya	**Angola**
Burundi	**Tanzania**	Botswana
Comoros	Uganda	**Democratic Republic of Congo**
Democratic Republic of Congo		Lesotho
Djibouti		**Malawi**
Egypt		**Mauritius**
Eritrea		Mozambique
Ethiopia		**Namibia**
Kenya		**Seychelles**
Madagascar		South Africa
Malawi		**Swaziland**
Mauritius		**Tanzania**
Namibia		**Zambia**
Rwanda		**Zimbabwe**
Seychelles		
Sudan		
Swaziland		
Uganda		
Zambia		
Zimbawe		

Source: InfraAfrica Consultants

V. OVERVIEW OF CAPACITY AND CONDITIONS OF TRANSIT CORRIDORS

23. In general, the landlocked countries of East and Southern Africa have relatively adequate transit access corridors for their regional and international trade. The main issues relate to the condition and performance of these corridors. In this respect there are three broad areas that deserve particular mention. These are:

- The general condition of the infrastructure on the Transit Corridors, which impacts on the overall capacity of these corridors
- Operations and management, which affect the overall performance of the corridors
- Cross-border facilitation, which has an overall effect on the efficiency of the Transit Corridors

24. The efficiency of the transit transport systems has a major impact not only on the export competitiveness, particularly of the land-locked countries, but also, on the overall economic growth potential of these countries. Access for land-locked countries is particularly important. This requires effective cooperative arrangements between landlocked countries and their maritime neighbours. Although cooperative arrangements exist, in practice, the overall impact of these measures has been rather limited due to a combination of factors, among them, slow implementation, unilateral actions and policy reversals by countries.

VI. PORT CAPACITIES AND THROUGHPUT

25. East Africa has two major ports, Dar-Es-Salaam and Mombasa which serve, principally, the landlocked countries of Uganda, Rwanda, Burundi and eastern DRC. Southern Africa, outside Tanzania, has almost ten ports that serve or potentially could serve the transit transport needs of landlocked countries. There are three ports in Mozambique, one in Namibia and five in South Africa. Of these, the major ports serving transit traffic are, Beira and Maputo in Mozambique and Durban, Cape Town and Port Elizabeth in South Africa. The port of Walvis Bay in Namibia, is a potentially important alternative transit port for Botswana, DRC, Zambia and Zimbabwe, particularly for traffic originating from North America and Europe on the western sea-board.

26. Table 3 provides a summary of port capacity and utilisation matrix for Eastern and Southern Africa:

Table 3
Capacity utilisation of SADC and East African ports for container handling, 1999 and 2000

PORT	RATED HANDLING CAPACITY ('000 TEUs)	ACTUAL NUMBER OF CONTAINERS HANDLED ('000 TEUs)			
		2000	Util %	1999	Util %
KENYA					
Mombasa	250				
TANZANIA					
Dar-Es-Salaam	120	112.7	93.9	108.2	90.1
MOZAMBIQUE					
Nacala	30	25.2	84.0	19.5	65.0
Beira	60	34.5	57.5	32.6	54.4
Maputo (and Matola)	28				
MAURITIUS					
Port Louis	225	34.9	124.5	30.3	108.4
SOUTH AFRICA					
Richards Bay	--	--	--	--	--
Durban	1,365	1,291.1	94.6	969.1	71.0
East London	185	24.1	13.0	20.8	11.2
Port Elizabeth	252	287.1	113.8	250.8	99.5
Cape Town	420	394.9	94.0	327.7	78.0
Saldanha Bay	--				

NAMIBIA					
Walvis Bay	50			24.7	49.3
ANGOLA					
Namibe	--			2.4	
Lobito	--				
Luanda				74.1	

Source: SATCC Technical Unit/InfraAfrica Consultants

27. SADC has a system of 15 ports, which are classified as "regional". Continental SADC is served by eight regional ports along the Indian Ocean coast, and six along the region's Atlantic coast. The Indian Ocean ports include the Mozambican ports of Nacala, Beira and Maputo, and the South African ports of Richards Bay, Durban, East London and Port Elizabeth. The Atlantic coast ports are the South African ports of Cape Town and Saldanha Bay, the Namibian port of Walvis Bay, and the Angolan ports of Luanda, Lobito and Namibe.

28. Most of the SADC ports serve predominantly their own respective Member States. The existing regional ports serve all landlocked SADC member States almost exclusively. The principal transit ports are Dar Es Salaam, Nacala, Beira, Maputo and Durban along the Indian Ocean and Walvis Bay on the Atlantic coast. In recent years, these regional ports have performed satisfactorily. The Angolan ports of Namibe, Lobito and Luanda, which could potentially serve other countries of the region, are not available owing to the prevailing internal strife in that country.

29. East Africa has two principal ports, Dar-Es-Salaam in Tanzania and Mombasa in Kenya. The Tanzanian port of Mtwara, which is to be one terminus of the Mtwara development corridor, is a potential regional port. The port of Dar-Es-Salaam serves the landlocked countries of Uganda, Rwanda and Burundi through the Central Corridor which is a multi-modal route involving road, rail and lake.

30. The Kenyan port of Mombasa is a principal seaport and is a major provider of essential international maritime links for the East African landlocked countries. The deep-water port has 13 general cargo and 3 container berths. Transit access for the landlocked countries is through the Northern Corridor which operates under the framework of the Northern Corridor Transport Agreement (NCTA). The Agreement involves Kenya and the landlocked countries of Uganda, Burundi, Rwanda and DRC. The container terminal in the port of Mombasa is linked to the new Inland Container Terminals or "Dry Ports" in Nairobi, Kisumu and Eldoret.

VII. INLAND WATERWAYS AND LAKES

31. When discussing transit transport, navigable inland waterways and lakes are often left out of the picture. Yet, for countries that border these water systems and lakes, they are an important means of transport as links to major corridors and, in some instances, the only means of transport for these countries.

32. Many SADC member countries are endowed with several inland waterways which offer transport potential. Some of the waterways are shared among SADC member countries only, while others are shared with non-SADC countries in the Eastern and Central African regions. The main navigable waterways include:

- Lake Malawi/Niassa/Nyasa, which is shared by Malawi, Mozambique and Tanzania
- The Zambezi River, which traverses Zambia, Zimbabwe and Mozambique
- The Shire River, which starts in Malawi and joins the Zambezi in Mozambique
- Lake Tanganyika, the world's second deepest lake, which is shared by three SADC member States (i.e. Tanzania, Zambia and the Democratic Republic of Congo) and one non-SADC State (Burundi)
- Lake Victoria, which is shared by Tanzania, Kenya and Uganda
- The Congo River, shared by the DRC and the Republic of Congo
- Lake Kariba, which is shared by Zambia and Zimbabwe

33. In the Democratic Republic of the Congo, the Congo River with its many tributaries and sub-tributaries forms Africa's largest network of navigable waterways. Within the territory of the DRC there are some 14,000 km of navigable waterways.

34. Various agreements have been entered into by countries on either on a bilateral or a multilateral basis to govern the use of these waterway systems as a natural resource, economic resource or transport resource. In Southern Africa, SADC countries have signed a Protocol, or regionally binding legal agreement, on the utilisation and exploitation of the region's watercourse systems - the Protocol on Shared Watercourse Systems. This is an example of a multilateral agreement.

35. At the bilateral level, examples include the agreement between Malawi and Tanzania. Shipping operations between Malawi and Tanzania on Lake Malawi/Niassa/Nyasa are presently governed by a "Lake Shipping and Port Services Agreement" which the two countries signed in 1995. The agreement covers, *inter alia*, cooperation in the operation of lake and port services, adoption of a uniform system of coastal surveys, navigational charts and the erection of navigational aids. The Agreement provides, also, for the sharing of information on incidents of marine pollution. These agreements provide models that can be replicated elsewhere.

36. Tanzania shares the two Great Lakes of Victoria and Tanganyika with its neighbours to the north and west. Tanzania uses Lake Victoria for its trade and transit trade with Kenya, Uganda, Rwanda and Burundi, and Lake Tanganyika for its trade and transit trade with neighbouring Democratic Republic of Congo, Zambia and Burundi.

37. The port of Mpulungu in Zambia is becoming an increasingly important inland port for international traffic from Malawi, Zimbabwe, South Africa and Zambia to Rwanda, Burundi and DRC. Mpulungu port located in Zambia at the southern tip of the lake Tanganyika, is another principal port along the lake. In 1999, the port handled some 53,091 tons of cargo which represented a decline of 58,210 tons (or 52%) on the 1998 tonnage of 111,301. The decline in traffic was mainly due to the sharp drop in transit traffic following the imposition of sanctions on Burundi by its neighbours.

38. The Tanzania Marine Services Company operates regular passenger and cargo services over both Lake Victoria and Lake Tanganyika. There is also a wagon-ferry service between Mwanza and the Ugandan ports of Port Bell and Jinja. The wagon-ferry service is mainly used for the movement of Uganda's exports of coffee, cotton and tea as well as bulky imports such as fertilizers. The wagon-ferry service is a joint operation with the Uganda Railways. These services are also extended to the port of Kisumu in Kenya.

39. The port of Mwanza, which is the Marine Services principal port on Lake Victoria, handled some 152,242 tons in 1998 as against some 106,000 tons in 1997. The number of passengers handled in 1998 was 319,548 compared to 402,463 in 1997. On Lake Tanganyika, the Marine Services Company operates regular passenger and cargo services between the port of Kigoma and the port of Bujumbura (Burundi) to the north and Mpulungu port (Zambia) to the south. Kigoma is the terminus of Tanzania's 2,600 km Central Railway Line which starts from Dar es Salaam.

VIII. RAILWAY CAPACITIES AND SYSTEMS

40. All the SADC mainland countries, with the exception of Lesotho, have railway networks. The Southern African region has an interconnected regional rail network (IRRN) comprising ten railways with a standard (1.067-mter) gauge track of 33,593 kilometers. Railways on the SADC mainland currently not connected to the IRRN include Malawi Railways and the Mozambican CFM (North) as well as the Angola network. These have physical links with the rest of the network but these links are unserviceable due to previous or on-going war situations. These networks include the Benguela Railway in Angola, which is linked to the DRC and Zambian networks, and the Sena line – CFM (Central) in Mozambique, which is connected to the Malawi network.

41. In terms of general condition, the southern tier of SADC nations have networks in fairly good condition, whilst the railway networks of Mozambique and the northern tier of nations have problems of deferred maintenance and resultant unsatisfactory condition. The Governments of these member States have started rehabilitation or are looking to the private sector to provide the needed investment for railway system rehabilitation, and in this regard concession arrangements are being pursued or investigated.

42. East Africa has three railways systems, Kenya Railways Limited (KRL), Tanzania Railways Corporation (TRC) and Uganda Railways Corporation (URC). Unlike their Southern African counterparts, the other landlocked countries in East Africa, namely Rwanda and Burundi, do not have railway systems of their own.

43. Kenya has a single-track railway system running from Mombasa to Nairobi and onward to Uganda with branches to Nanyuki, Kitale and Kisumu and a branch-line connecting Kenya to Tanzania.

44. Tanzania has two railway systems, the TAZARA (Tanzania-Zambia Railway Authority), which is jointly owned by the Governments of Zambia and Tanzania, and the TRC network. The TAZARA network has the same gauge (1.000m) as the rest of the Southern African railway network. Thus, it is possible to run through trains from the South African port of Durban to the port of Dar-Es-Salaam. In fact, this is already happening. A private company called Trans-Africa Railway Corporation has negotiated access rights and is now operating through container trains

from Gauteng in South Africa to Dar-Es-Salaam. The TRC network is the same gauge as the rest of the East African rail network (1.067m) and is not compatible with the Southern African network. Transhipment between the two networks occurs at Kidatu, where a special "rail-to-rail" transit facility has been built.

45. The Uganda Railways network comprises the Main line from Kampala to Malaba, the Western line from Kampala to Kasese, the Northern line from Tororo to Pakwach, the Busoga loop line from Mbulamuti to Busembatya and the short Kampala to Port Bell Spur line. There is also a wagon ferry service from Port Bell to the inland port of Kisumu in Kenya. Currently, only the sections Kampala-Malaba, Kampala-Port Bell and the spur line to the Kisumu and Mwanza ferry terminals on Lake Victoria, or just 21% of the network, are operational.

Table 4
SADC/EAC railway corridors

CORRIDOR	RAILWAY	SECTION	SECTION LENGTH (Kilometers)
SADC RAILWAYS			
Dar-Es-Salaam	Zambia Railways	Ndola- Kapiri Mposhi	115
	TAZARA	Kapiri Mposhi-Mbeya	891
	TAZARA	Mbeya-Dar es Salaam	969
	Corridor Length	Ndola- Dar es Salaam	1,975
Nacala	Malawi Railways	Mchinji-Nkaya	399
	Malawi Railways	Nkaya-Nyuchi	101
	CFM(North)	Nayuchi-Nacala	615
	Corridor Length	Mchinji-Nacala	1,115
	Corridor Length	Lilongwe-Nacala	1,014
	Corridor Length	Blantyre-Nacala	803
Beira	Zambia Railways	Ndola-Livingstone	773
	National Railways of Zimbabwe (NRZ)	Victoria Falls – Bulawayo	464
	NRZ	Bulawayo-Mutare	755
	CFM (Central)	Mutare-Beira	317
	Corridor Length	Ndola-Beira	2,309
Limpopo	NRZ	Harare-Somabhula	313
	NRZ	Somabhula-Chicualacuala	399
	CFM (South)	Chicualacuala- Maputo	534
	Corridor Length	Harare - Maputo	1,246
Ressano Garcia	CFM (South)	Ressano Garcia-Maputo	88
	Spoornet	Komatipoort-Golela	186
	Corridor Length	Ressano Garcia-Golela	274
Goba	Swaziland Railways	Matsapha – Siweni	120
	CFM (South)	Siweni-Mpauto	73
	Corridor Length	Matsapha - Maputo	193
Beitbridge/Gauteng	Zambia Railways	Ndola-Livingstone	773
	NRZ	Victoria Falls- Bulawayo	464
	NRZ	Bulawayo-Rutenga	394
	NRZ	Rutenga-Beitbridge	134
	Spoornet	Beitbridge-Cape Town	2,197
	Corridor Length	Ndola-Capetown	3,962
	NRZ	Bulawayo-Beitbridge	528

Richards Bay/Durban	Swaziland Railways	Border (North) – Border (South)	186
Plumtree/Mafeking	NRZ Botswana Railways Spoornet Corridor Length Corridor Length	Bulawayo-Plumtree Border (Zimbabwe) – Border (South Africa) Bulawayo-Cape Town Ndola – Cape Twon	102 640 1,482 2,224 3,461
Benguela	Benguela SizaRail Corridor Length	Lobito – Dilolo (DRC) Mokambo – Sakania (Zambia) Lobito (Angola) – Sakania (Zambia)	1300 700 2,000
EAC RAILWAYS			
Northern Corridor	Kenya Railways Uganda Railways	Mombasa – Nairobi Nairobi Kampala Mombasa-Kampala Kampala-Malaba (Main Line) Kampala-Kasese (Western Line) Tororo-Pakwach (Northern Line) Mbulamuti – Busembatya (Busoga Loop Line) Kampla – Port Bell (Port Bell Spur) Port Bell – Kisumu (Kenya) and Mwanza (Tanzania) – Wagon Ferry Service Total Uganda Railways Network	 1,333 251 333 502 140 9 1,244
Central Corridor	Tanzania Railways Corporation (TRC)	Dar es Salaam – Kigoma (Connecting to Bujumbura by lake and Rwanda by road)	1,254

Source: SATCC-TU/InfraAfrica Consultants

IX. ROAD NETWORK IN EASTERN AND SOUTHERN AFRICA

46. Roads are the most important means of transport in Southern and Eastern Africa for both freight and passenger traffic. The bulk of transit traffic in both regions is also conveyed by road. Thus, addressing issues related to roads and road transport would a have a far greater impact on reducing transport costs relative to interventions in other modes of transport.

A. Road infrastructure

47. From the regional integration point of view, a major achievement is that the Southern African countries have designated a Regional Trunk Road Network (RTRN) system with corresponding common design standards and specifications and common road signs. Although the RTRN is in varying state and condition from country to country, generally it is in fair condition. The designation of the RTRN also offers major opportunities for the private sector to invest in toll roads which can be multi-territorial.

48. The total SADC road network is about 888,081 kilometers, of which 100,083 kilometers are primary roads, 229,179 kilometers are secondary roads and 488,819 kilometers are tertiary roads, out of which a portion, approximately 50,000 km, has been designated the RTRN.

49. Whereas the arterial roads are generally in satisfactory condition in the southern tier of the region (South Africa, Botswana, Lesotho, Swaziland, Namibia, Zimbabwe), the roads of Mozambique and the northern tier of SADC nations (Zambia, Malawi, Tanzania, DRC) require major rehabilitation and upgrading. Some of these are ongoing. Because of continuing civil strife in Angola, however, it is not possible to forecast when the country's arterial road network can be brought generally to a maintainable state. The secondary and tertiary roads throughout the region require improvement and the assurance of adequate and timely maintenance.

50. With respect to East Africa, Tanzania is included in the description of Southern Africa above. . Of the East African countries, Kenya has the most developed road network, totalling 68,000 kilometers, connecting all commercial centres by paved roads and handling about 70% of all freight. Half of this traffic is transit traffic to neighbouring countries. Uganda's road network totals about 27,000 kilometers of which only 1,800 kilometers is paved. Of the 225,200 unpaved network, 4,800 is made up of all-weather roads. Table 5 shows the position of other East African countries.

Table 5
East African road network

COUNTRY	TOTAL NETWORK	PAVED	UNPAVED
Burundi	14,480	1,028	13,452
DRC	157,000	N/A	N/A
Kenya	68,000	9,520	58,480
Tanzania	88,200	3,704	84,496
Uganda	27,000	1,800	25,200
Rwanda	12,000	1,000	11,000

Source: CIA- The World Fact Book, 2000 and Indian Ocean Rim Network

51. Overall, the condition of roads in Africa ranges from poor to very poor. There are very few roads in fair or good condition. Taking Southern Africa, which has relatively better roads than other parts of Africa, as a proxy, the proportion of paved roads in good condition is only 56 per cent with 24 per cent classified as being in fair condition and 20 per cent in poor condition.[7] The roads in East Africa are in relatively poor condition compared to Southern Africa.

52. Most reforms taking place in Africa in the road infrastructure sector are therefore aimed at cost recovery based on economic criteria so as to mobilize sufficient resources to maintain the roads. The other is the need to improve the quality and cost effectiveness of road maintenance. It is estimated that savings of up to 25 per cent can be realized from out-sourcing instead of having the roads departments carrying out their own in-house maintenance (or force account).

[7] Southern African Development Community - Transport and Communications Report - February 1997

B. Road passenger transport

53. Road transport services are generally responsive to market demand and are almost wholly liberalised at national level in all SADC and EAC regions. Market entry into the provision of cross-border services is in the process of being liberalized. The most vibrant, visible and competitive private sector participation is in the road transport industry, particularly passenger transport. The road passenger industry is a rapidly growing market in the two regions. This has been a result of a number of factors, among them increases in urban populations, greater mobility of populations in the regions as a result of general relaxation of travel and foreign currency restrictions in most countries, and liberalization of trade. These factors and economic disparities among countries in the two regions have led not only to increased travel and labour migration but also to a significant increase in informal trade. Most countries have also liberalized their passenger transport industries.

C. Road Freight

54. Road freight is the dominant mode of transport in the both regions. It is made up of some large companies with subsidiaries or operations throughout the region, but the majority are often small "owner/operator" fleets. As in passenger transport, this is an area occupied almost exclusive as by the private sector. Only a few countries have public by owned freight companies, such as Autonet in South Africa, but these are exceptions.

55. Unlike the road passenger market, the freight market is, in some sense, self regulating because of the high costs of entry and the fact that competitiveness is dependent on the ability to obtain contracts and remain in business. As cross-border trade increases, this is an industry where there is great potential for private sector growth, particularly for local entrepreneurs and employment creation.

56. The major issue with respect to road transport, particularly freight, is cost recovery for road use and the management of overload control. While there is agreement in principle to a uniform system of road user charges for the SADC RTRN, the problem has been modalities for implementation in practice at the regional level. At the national level, there is agreement that the long-term solution to the large backlog of road maintenance that the region faces is to set up dedicated road funds managed by independent or at least autonomous road boards with the strong participation of the private sector. Most SADC countries have already set up or are in the process of establishing such structures.

57. In terms of operations, the issue of cross-border permits still needs to be streamlined throughout the region. There are still vast differences across countries in terms of duration of permits, types of permits issued and the charges for such permits. This makes it difficult for operators with cross-border regional movements to plan their operations effectively. However, even in such areas, there is some progress. For example, agreement has been reached on a regionally recognised SADC driver's licence, which a number of countries in the region have already started issuing. The COMESA Common Carriers Licence is also in use in most COMESA countries, replacing the permit system.

X. INLAND CONTAINER DEPOTS AND OTHER TRANSIT FACILITIES

58. The Eastern and Southern African regions have major inland container depots (ICDs), mostly in the large industrial centres, often the capital cities. These are often owned, managed and operated by the large clearing and forwarding agents in the two regions, among them MANICA Trans-border, Agence Maritime Internationale (AMI) and Khune Nagel. Most of these agents are linked to international shipping lines. In East Africa, there are ICDs in Nairobi, Kampala, Kigali and Bujumbura. There is a trend to upgrade existing ICDs and construct new ones. This is in part a reaction to the fact that most international traffic is now containerised and that despite the problems of transit, containers still offer a much safer and reliable alternative in terms of security of goods.

A. ICDs expanding

59. Development of ICDs is also expanding. For example, the Kenya Ports Authority (KPA) has embarked on a policy of bringing services closer to the customer by developing ICDs. The ICDs or "Dry Ports" are linked directly to the Mombasa Container Terminal by a special "Railtainer" service. The Kenyan ICDs include:

- Nairobi Inland Container Depot
- Kisumu Inland Container Depot
- Eldoret Inland Container Depot, which is currently under construction in North-Western Kenya. This ICD is intended to serve western Kenya as well as Uganda, Rwanda, Burundi and DRC

60. Tanzania has Isaka Dry Port which is a road/rail container transhipment facility for traffic en-route to Rwanda and Burundi. As in East Africa, Southern Africa has numerous ICDs, ranging from the complex and most sophisticated such as City Deep in Johannesburg, to smaller facilities at customer sites in almost all the capital and commercial cities of these countries. ICDs play an important role in improving transport efficiency due to a number of factors, among them, the fact that they:

- facilitate prompt discharge of containers from rail wagons and trucks, thus enabling quicker turn-around for both road and rail transport
- help to avoid the practice of using rail wagons and trucks as storage, thus freeing transport capacity
- can facilitate pre-customs clearance of goods, thereby improving transit times and general efficiency

B. ICDs as innovative solutions for land-locked countries

61. Tanzania offers an interesting innovation in terms of cooperative arrangements between maritime and landlocked countries which empower the landlocked countries to take control of their cargoes. As part of Malawi's Northern Corridor, which links Malawi's capital city, Lilongwe, and the commercial capital Blantyre, through a rail/lake/road transit system to the port of Dar-Es-Salaam in Tanzania, the Government of Tanzania has allowed the Government of Malawi to construct, own and operate dedicated ICDs (called Cargo Centers) in the port of Dar-Es-Salaam and at Mbeya within Tanzania. The facilities are operated by a

company called Malawi Cargo Centers Limited (MCCL). Thus, as soon as goods are discharged from the ship to the MCCL facilities at the port of Dar-Es-Salaam, they become the responsibility of MCCL, who then takes over full control and liability for the goods. This enhances reliability and security of the goods.

62. Whether in East or Southern Africa, the challenge of ICDs has been the inability to utilise through bills of lading (TBL). The problem in this regard has been two-fold: the reluctance of international shipping lines to issue TBLs, and the insistence by government authorities, particularly customs and police, on inspection of goods in transit. Shipping lines are often reluctant to shoulder responsibility for the surface transport leg of the journey due to the well-documented problems of transit in the African hinterland. Governments in turn are wary of "letting go" of controls.

63. The suspicion by Governments of smuggling (which shippers often claim are exaggerated) leads government authorities, particularly customs and Police, to take unilateral actions such as random inspections of containers and goods in transit resulting in breaking of container seals and consequent loss of goods and allegations of corruption. These issues have particularly been well documented on the East African Northern Corridor. In Southern Africa, there are instances for particular shipments or clearing agents where it has been possible to negotiate the use of TBL and pre-customs clearance of goods. However, this is an exception rather than the rule.

C. The missing gap in transit facilities

64. What is missing in terms of transit facilities along the major transit transport corridors in both Southern and East Africa are facilities that would enhance both the quality and efficiency of transport. These include:

- Truck stops en route to facilitate rest and recuperation for drivers
- Workshops to enable emergency repairs to be undertaken
- Facilities at border posts such as parking, accommodation, restaurants, money bureaus, communication facilities and related facilities

65. A trucker's worst nightmare is to have a vehicle break-down or to have an accident en route because there are often no communications, repair and related facilities, which results in delays of days before contact can be made with parent offices, usually by means of relaying messages through other truck drivers.

XI. FACTORS AFFECTING PERFORMANCE

A. General

66. The performance of the transit transport corridors in East and Southern Africa has been less than satisfactory. General facilitation of transit traffic is poor, transport costs are high and this impacts negatively on the economic competitiveness of these countries.The reason for the current state of transit transport in the two regions has not been lack of documentation or transit transport constraints and impediments, but lack of capacity to address these issues on a systematic basis. There has been more than enough analysis done over the years on the challenges facing international transport movements in both regions. The major problem has been the wide gap

between identification of problems and instituting practical, sustainable solutions to address these problems on the ground. There are at least ten factors that can be advanced in this respect.

B. Fragmented rather than integrated operations

67. Despite their regional character, transit transport systems have continued to operate as fragmented national systems rather than integrated regional systems. As a result, users must deal with the needs and requirements of each country rather than the needs of smooth transit across a regional corridor. Consequently, solutions to improve transit facilitation tend to have a national

rather than a regional focus, hence the limited impact. It is said that the capacity and efficiency of a transport logistics chain is determined by its weakest link. Thus, in transit transport operations, it is not enough that part of a system works well in one country or some systems work well in some countries, or indeed, that some systems work some of the time. To be effective, all transit transport systems must work well in all countries all the time. This is, unfortunately, currently not the case.

C. National interests versus regional benefits

68. It is not unusual for countries to agree on viable policies and practices at regional level, only to have them reversed at national level in the name of national interest and sovereignty. For as long as countries put national interests before those of the region, there will always be the danger of lack of, or poor implementation of or even reversals of agreed policies and measures. Countries must be made to recognise that they live an interdependent world and that overall benefits will accrue only if one country is not made better off at the expense of the other. Through the regional economic groupings of EAC, COMESA and SADC, there is a gradual shift to recognising the importance of regional interests, but this has been slow in coming. Until broader regional benefits are seen and accepted as overriding narrow national interests, transit facilitation will remain problematic.

D. Lack of harmonization and coordination

69. For the transit transport systems to operate efficiently, there must be uniformity of systems and procedures. As an example, a trucker moving an export shipment from South Africa to Kenya must traverse Zimbabwe, Zambia and Tanzania. The trucker must comply with the requirements of the five countries, including the originating country South Africa and the destination country Kenya. Thus, it does not make sense if the trucker is faced with differing weight limits, for example, in the five countries or in some of the countries. For efficient transit movement and facilitation, the load limits must be harmonized throughout. For this to occur, there must be supporting policies and legislative frameworks, including enforcement capacity.

70. Thus, harmonisation and effective coordination is required with respect to:

- Policies and practices
- Technical standards
- Operational standards

- Personnel training and certification, particularly for personnel involved in cross-border movements such as train crews and truck drivers
- Compliance with regulations and levels of penalties
- Commodity nomenclature and classification
- Documentation and procedures
- General transit and cross-border facilitation

E. Poor implementation record

71. The biggest problem and in many respects disappointment with respect to finding sustainable solutions to identified transit transport constraints has been the poor implementation record. Unfortunately, based on InfraAfrica's experience of working in the two regions over the past years, donors and international organisations are as much to blame for this state of affairs as are the Governments and regional institutions in these regions. This conclusion is based on a number of premises.

1. Limited donor coordination

72. There has been poor donor coordination, not only in undertaking assessments and various analyses of transit transport corridors, but also in devising solutions. There has been a multiplicity of studies undertaken over the years but very little in terms of tangible implementation successes. This is because efforts and resources are fragmented. One way of overcoming this problem is to create some sort of coordinating mechanism on transit transport, one each for Southern Africa and East Africa. Such mechanisms could be called "Transit Corridor Coordinating Committees (TCCCs)" and could involve donors, regional institutions, transport service providers, Governments and others as appropriate. Their role would be to ensure that there is an integrated and coordinated approach to addressing transit transport issues and, in particular, to setting priorities and ensuring optimal resource utilisation. The operational modalities of the proposed TCCCs would need to be defined further.

2. Lack of implementation guidance

73. Because of capacity constraints in terms of expertise and resources, regional organisations have often not been in a position to provide effective leadership and guidance to Governments to deal with identified issues. Despite the multiplicity of gatherings in terms of meetings, workshops and symposia, implementation remains weak owing largely to lack of effective implementation guidelines. Often, recommendations are not matched by corresponding detailed and coordinated implementation guidelines. It is left to each Government to decide how best to proceed. Clearly, this approach needs to change. In part, this can be made possible by the TCCC proposed above which would, among other responsibilities, ensure that tangible plans are put in place to address identified constraints.

3. Limited implementation capacity

74. Implementation has also often suffered from narrow national interests overriding broader regional interests. While there is a temptation to place the blame on Governments, and while it is true that Governments share a large part of the blame for the poor implementation record, it is equally true that part of the problem has been lack of an informed basis for decision making.

Governments are often concerned about losing control and losing revenue. Thus, it is not enough to implore Governments to implement identified measures. What is required is to address the concerns of Governments by providing informed analysis of options and to convince them through documented proof that they stand to gain in the long run or to provide them with tangible alternatives. This analytical approach is currently missing, thus denying Governments an informed basis upon which to make decisions.

4. Inability to monitor and enforce compliance

75. The implementation record is not completely dismal. There have been some success stories. These include the SADC Protocol on Transport, Communications and Meteorology, which is a legally binding agreement with clear guidelines with respect to the right of transit, the COMESA Yellow Card or cross-border third party motor vehicle insurance scheme, and the COMESA Customs Declaration (CD Form). Notwithstanding this progress, however, in practice the problem has been compliance. There are no mechanisms at regional level to enforce compliance, and even if there were, arguments of national sovereignty often override any regional protocols and agreements. As already mentioned, the best way to ensure compliance is to provide informed options to Governments and convince them of the long-term benefits of compliance. Any punitive measures are unlikely to work.

F. Monopoly service provision

76. Distortions in service provision have occurred along most transit transport corridors as a result of monopolies. For example, there has been a major shift of traffic in both East and Southern Africa from road to rail. Road now accounts for about 80% of traffic movements in Southern Africa and 70% in East Africa. Three decades ago, the situation was the opposite. The major reason is that rail companies have remained monopoly service providers, owned and operated by Governments while the road transport industry has become largely private by owned and led and therefore more competitive. As long as railways remain in government hands, the situation is unlikely to change. While a competitive road transport industry may in the short term appear to provide benefits to users through a more efficient service, in the long term, the economic cost to the economies of these countries by increased utilisation of road transport may be higher. This is due to factors such as high national fuel bills, high replacement cost of roads due to damage by heavy goods vehicles (HGVs) and adverse environmental effects.

G. Poor condition of infrastructure

77. Despite massive interventions by donors and multilateral funding institutions to provide funding for rail rehabilitation, in practice the general condition of railways in both East and Southern Africa, with the exception of a few, remains poor. Even if additional funds were provided, it is unlikely that the situation would change for the better without a corresponding change in the ownership structures of the railways.

78. The general condition of roads, again with the exception of a few countries, is the same. This has been the result of inadequate maintenance, high road damage due to increased payloads, weak enforcement, and limited government budgets for road rehabilitation and new construction. Innovative approaches are required for road management. The solution in the long term is to convert roads with high traffic levels to toll roads so that they are "self-paying". The poor condition of infrastructure leads to high operating costs and, subsequently, to higher transport costs

and ultimately to higher transaction costs. Thus, addressing the condition of infrastructure is critical to achieving efficiency of transit transport and reducing overall costs.

H. Poor information availability and sharing

79. African countries and regions have not learned from each other as much as they should. There is very limited dialogue and information sharing on best practices. There is thus a need to improve dialogue, networking and information sharing by establishing linkages with other regions of Africa and internationally and developing dedicated web-sites and related mechanisms for purposes of marketing and information dissemination.

80. Greater efforts should be made to introduce electronic-based information technologies. This could take the form of an internet/electronic-based data base of transit requirements (transit charges, documentation required en route, customs documentation and procedures, axle load limits, border post opening hours, information on facilities along the route such as fuel stops, rest, restaurants, etc, including road conditions). This is potentially an investment that could be undertaken by the private sector in partnership with the public sector.

I. Absence of performance targets

81. A major weakness in existing regional programmes is that there is no systematic mechanism for measuring progress or lack of it. Again, this is linked to the changed nature of the environment and measures currently under way. Unlike in the days of projects which were more quantitative, with a start and an end date, as well as built-in indicators, ongoing reform processes which are qualitative in nature are more difficult to track and measure.

82. The challenge is to put in place mechanisms and benchmarks which can form the basis for monitoring progress and ascertaining the extent to which the regions are meeting or not meeting set or agreed targets. For example, such baseline indicators, targets and measurements are required for, among others, monitoring reforms, their implementation and impact and monitoring the performance of transit transport corridors. Such performance systems and mechanisms are currently not in place.

J. Limited public/private partnerships

83. From a relationship characterised by suspicion and even hostility two decades ago, Governments of the two regions and the private sector are now working together to move the transit transport reform agenda forward. There has been an emergence of regional trade and industry associations, which are now providing direct input into the regional and national policy reform agenda. However, this partnership between the public and private sector is a relatively new one. In addition, the various private sector groups and industry associations are also nascent and require considerable support before they can stand on their own feet.

84. Public/private sector partnerships and developments are new. They therefore need to be nurtured and strengthened. In addition, they need to be broadened to include large business

interests and financing institutions. There is also a gap in that other critical institutions that impact on the operations and performance of international transport corridors, such as customs, immigration and police, have thus far not been effectively involved in the regional and national dialogue that has been ongoing. This deficiency needs to be corrected.

85. A related aspect of strengthening public/private partnerships is the creation of investment opportunities for local and regional entrepreneurs. Ongoing reforms and privatisation initiatives offer great possibilities and opportunities to local entrepreneurs. Thus far, there has not been a systematic and concerted effort to involve local entrepreneurs in ongoing initiatives. There are opportunities for these local entrepreneurs in joint ventures, cross-border investment and related investments in such areas as border post facilities and services, electronic transit information systems and others. This requires education of these entrepreneurs and exposing them to the investment opportunities available.

XII. PERFORMANCE OF TRANSIT TRANSPORT SYSTEMS

A. General

86. In terms of initial design of the port, road and rail systems, the transit transport Corridors in East and Southern Africa have adequate capacity to cater for current and projected medium-term traffic growth well into the next decade, provided they operate at their design capacities. However, a major expansion and improvement of the systems will be needed to cater for the hoped-for faster rates of economic growth.

87. With the exception of the South African segments of the corridors, which are operating at almost optimal capacity, all other corridors are operating well below their installed capacities. Most of them, such as the Angolan, Mozambique and the East African Corridor of Mombasa, reached their peak in the seventies. Since then, most of the corridors in East and Southern Africa are operating below capacity. For example, the SADC regional ports were estimated by SATCC to operate at on average 70–80 per cent below capacity for dry cargo and 55 per cent for container traffic. A similar, and possibly worse, situation pertains for roads and railways.

88. There are physical as well as non-physical factors that have led to this situation. The large backlog of maintenance has meant that most of the road and rail links, including ports, are generally in fair to poor condition. For rail, this leads to low speeds, derailments and therefore general unreliability of the system. The poor performance of rail systems is one of the reasons why there has been a major shift from rail to road over the past two decades, particularly for Southern Africa.

89. Unfortunately, the shift to road transport has meant not only increased traffic on the roads, but also increasingly heavier payloads. It is not unusual for traditional bulky and long distance payloads such as copper and steel to move by road. In the absence of effective road management and cost recovery systems, this leads to accelerated wear and tear and depreciation of the roads. This, in turn, has led to increased vehicle operation costs, translating into higher tariffs and, consequently, higher prices for the consumers.

B. High transport costs' impact on competitiveness

90. A World Bank study[8] offers revealing perspectives on Africa's competitiveness. The study sought to determine whether relative differences in freight costs between African and other countries contributed to Africa's poor export performance and what effect this had on location of industrial activity in Africa. The study also looks at whether the structure of freight costs on African exports influenced the composition of primary goods shipped. The study concluded that "freight costs are therefore a far more restrictive barrier to African exports than tariffs". In specific terms, "net (freight) payments averaged 42 percent for the landlocked countries (the study mentions 10 but there are actually 16 landlocked African countries (17 if DRC is included) – (Botswana, Burkina Faso, Burundi, Central African Republic, Chad, Ethiopia, Lesotho, Malawi, Mali, Niger, Rwanda, Sudan, Uganda, Swaziland, Zambia and Zimbabwe) whose trade must transit neighboring territories and, therefore, incur additional foreign exchange costs. For all developing countries as a group, these payments average 5.8 percent, a figure that corresponds to about one third of the corresponding African ratio".[9] The average figure for Africa as a whole is 25 per cent.

91. A recent United Nations Conference on Trade and Development (UNCTAD)[10]report strongly supports this conclusion. It concludes that freight costs averaged 14.7 per cent of c.i.f. import values for landlocked countries. However, the figures are much higher for the various African regions, with 27.5 per cent for West Africa and 23.6 per cent for East Africa. For developing countries as a whole, the average is 7.2 percent compared to about 4 percent for developed countries.[11]

93. The foregoing is a clear indication that for Africa to be competitive, concerted efforts are required to improve the performance of the Continent's transport systems, particularly international transport corridors or transit transport systems. Reducing transport costs would not only lead to improved competitiveness in the international market place, but would also result in lower input, production and consumer costs and ultimately to better economic performance for African countries as a whole and for East and Southern Africa in particular.

C. Cumbersome documentation, procedures and processes

94. Apart from the generally poor condition of infrastructure and the legacy of public monopolies, the other major cause of increased transit costs is the poor facilitation along the major transport corridors. There are two broad aspects to this: constraints posed by lack of harmonisation of standards and specifications, and those posed by absence of harmonisation of documentation, procedures and other administrative aspects of transit. There are five broad areas that require harmonisation if transit transport systems are to operate on an integrated rather than fragmented basis and perform efficiently (table 6). Lack of harmonisation of any of these aspects can lead to inefficiencies and sub-optimal utilisation of these transit systems.

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[8] Did External Barriers Cause the Marginalization of Sub-Saharan Africa in World Trade? – World Bank Discussion Paper No. 348 – Azita Amjadi, Ulrich Reincke, Alexander J. Yeats - 1996

[9] As in 5 above.

[10] Improvement of Transit Transport Systems in Land-locked and Transit Developing Countries: Report by the UNCTAD secretariat TD/B/LDC/AC.1/13.

[11] CargoInfo – Africa's Freight and Trading Weekly.

Table 6
Critical areas for transit facilitation

Technical Standards and Specifications	Areas include: ▪ Road design standards ▪ Road signs and markings ▪ Axle load limits ▪ Railway gauges and specifications
Operational Systems and Practices	These include: ▪ Train operating systems ▪ Uniform axle load limits ▪ Crew/staff training and certification ▪ Border post operating hours
Documentation and Procedures	Related to: ▪ Customs in general ▪ Goods in transit ▪ Transit bonds ▪ Insurance
Transit Charges	With respect to: ▪ Levels of charges ▪ Methods of collection ▪ Transparency
Other Areas	Such as: ▪ Security checks ▪ Verification of containers ▪ Unilateral actions by countries General management of border posts including cross-border coordination

Source: InfraAfrica Consultants

D. Border delays and high cost of transit

95. The biggest problem for road transport in both regions remains poor facilitation along transit corridors and in particular long delays at international border posts, especially for heavy goods vehicles (HGVs). It has been estimated that delays at the major border posts in Southern Africa cost the region in the range of US$ 48 million annually.[11]

96. The situation in East Africa is similar. It must be noted that these figures and table 7 refer to border delays only and do not include delays en route caused by a number of factors, among them police and security "road blocks" or checks, poor condition of roads, stops at weigh-bridge stations and phytosanitary checks. Given that, as indicated above, the bulk of traffic in the two regions moves by road, this is a major additional cost to doing business in these countries.

97. Facilitation of international traffic continues to be a major problem within both SADC and EAC countries. As an example, a trucker moving from South Africa to Kenya transiting Zimbabwe, Zambia and Tanzania has to undergo eight different checks at four international border points/frontiers-South Africa/Zimbabwe, Zimbabwe/Zambia, Zambia/Tanzania and Tanzania/Kenya. The trucker also has to deal with different authorities, customs, immigration, police and sometimes security.

98. Often the requirements are different in terms of documentation, customs inspections, security checks, transit and other charges and, more critically, requirements may change from time to time without operators being given adequate notification of the changes. This leads to considerable delays at international border posts, adding to the time and cost of transit.

Table 7 provides is an illustrative example of border post delays for selected international borders in Southern Africa.

Table 7
Delays at selected Southern African border posts

CORRIDOR	BORDER POST	COUNTRIES	ESTIMATED BORDER DELAYS (Hours)
Beira	Machipanda	Mozambique/Zimbabwe	24
	Zobue	Mozambique/Malawi	24
	Mutare	Mozambique/Zimbabwe	26
Maputo	Ressano Garcia	South Africa/Mozambique	6
	Namaacha	Swazuiland/Mozambique	4
North-South	Beit-Bridge	South Africa/Zimbabwe	36
	Chirundu	Zimbabwe/Zambia	24
	Victoria Falls	Zimbabwe/Zambia	36
	Martins Drift	South Africa/Botswana	6
Trans-Caprivi	Kazungula	Botswana/Zambia	24
Trans-Kalahari	Buitepos	Namibia/Botswana	6
	Pioneer Gate	Botswana/South Africa	4
TANZAM	Nakonde	Zambia/Tanzania	17

Source: SADC Transport Corridor Agenda, July 2000 (World Bank)/InfraAfrica Consultants

E. Government ownership and monopoly service provision

99. Until recently, with the advent of liberalisation and reforms, ownership of Transit Transport systems and facilities rested with Governments. Thus, port, rail and road systems were the purview of Governments. Correspondingly, operation of the systems rested with Governments in the form of public monopolies. The adverse effects of public monopolies in terms of lack of incentives, loss making, poor productivity and service quality, as well as the resultant high transport costs, are well documented.

100. Only over the past decade have reforms seen the emergence of concessions in ports and railways, paving the way for private sector participation in the ownership, operation and management of transit transport systems. As examples, Southern Africa now has a regional toll road that was financed and built by the private sector (the Witbank-Maputo Toll Road), as well as the first private by built and operated railway line, the Beitbridge-Bulawayo Railway. In East Africa, reforms and private sector participation are not as advanced as in Southern Africa but they are emerging. Various privatisation and concession options are under design, discussion or negotiation.

101. The challenge being faced during this process of reform is to engender a fundamental change in attitude by governments and service providers: Governments, from a culture of control to one of facilitation, and service providers from an inward approach to conducting business to an outward, customer-focussed approach. While this is beginning to happen, it will take time before it becomes an integral way of doing business in the two regions.

F. Port systems

102. Over the past decade, there has been a shift in the source of transit transport constraints from ports to surface transport systems. Two decades ago, the East African ports of Dar-Es-Salaam and Mombasa were notorious for cargo delays, pilferage and loss. The situation has improved considerably owing to additional investments in port systems, particularly container terminals, improved cargo clearance systems within the ports, and improved coordination at off-take points between port and surface transport systems. In Southern Africa, the limited access to South African ports due to sanctions put considerable pressure on the Mozambican ports of Maputo and Beira. This, coupled with the poor systems and management practices, meant considerable delays to shipments including cargo loss and pilferage. Today, the Mozambican ports are performing much better.

103. The combined throughput of all the 15 SADC regional ports declined from 203.29 million tons in 1998 to 201.32 million tons in 1999: a decline of some 1.97 million tons or 1.0 %. A substantial drop in the volume of containerized cargo at the ports of Beira, Durban and Port Elizabeth was a major contributor to this decline.

104. The restructuring of the port industry is ongoing in nearly all the member States. This entails principally creating adequate monitoring and regulatory capability to promote and oversee enhanced private sector involvement in financing, management and operation of port terminals and facilities, as well as provision of port services. The emerging public/private sector partnership in the port industry principally means that the region's port authorities will, as landlord port authorities, now be responsible for promotion, monitoring and aspects of regulatory functions, while the private sector will provide the services.

G. Railway transport

105. Most railways in Africa have been progressively losing traffic to roads over the past two decades. From being a dominant mode of transport in the seventies, railway transport started to decline in the eighties, and this trend continued into the nineties. As in roads, most investments in rail consisted of building new regional railway links such as the "Great Uhuru Railway" or the Tanzania-Zambia Railway Authority (TAZARA), jointly owned by the Governments of Tanzania and Zambia. This is also an example of one of the few cross-border railway investments in Africa. Investment in African railways also concentrated on purchase of equipment, locomotives and wagons. However, neither the donors or funding agencies providing the financing nor the railways themselves took any measures to institute sustainable systems for preventive maintenance, efficient asset utilization and efficient operations.

106. The result is that, by the late eighties and nineties, railway efficiency had dropped, profitability deteriorated, service standards declined and customers shifted from road to rail. Today, most railways, through a combination of restructuring, commercialization and concessioning are seeking to bring back efficient service and profitability. However, because the condition and performance of most rail systems have deteriorated so much, it will take a while before the results of these reforms can be realized.

H. High potential for rail connectivity

107. The potential for rail connectivity in Africa is great. All regions of Africa have one thing in common. They all have at least a 1.067mm gauge rail network. However, except for Southern Africa, which has the standard 1.067mm "Cape gauge", all other regions have a dual gauge of both the 1.00mm and 1.067mm standards.

Table 8
Railway connectivity in Africa

REGION	NUMBER OF COUNTRIES	RAILWAY GAUGE (Meters)
UMA – North	5	1.00m, 1.067m
ECOWAS – West	16	1.00m, 1.067m
COMESA – East and South	21	1.00m, 1.067
SADC – South	14	1.067m
ECCAS – Central	10	1.00m, 1.067m, 1.435m

Adapted from – Railway Transport in Africa: Status and Prospects – David Kajange, Chief of Transport, Organization of African Unity (OAU)/InfraAfrica Consultants

1. Innovative private sector solutions promoting connectivity and efficiency

108. While the whole of the southern region is interconnected and has one gauge all the way from Cape Town in South Africa to Dar-Es-Salaam in Tanzania, the east African region has the 1.00mm "German gauge" except for the TAZARA rail linking East and Southern Africa which, contrary to popular belief, has the same gauge as the rest of Southern Africa. However, differences in gauge need not deter rail connectivity in Africa. Innovative private–sector–led solutions can change this. A case in point is the connectivity that has been achieved between the Southern and East African rail systems in Tanzania.

109. At Kidatu in southern Tanzania, the East and Southern African railway systems come within meters of each other. A private company, the Trans Africa Railway Corporation (TARC), has exploited this to create a link between East and Southern Africa. A transhipment facility has been built at Kidatu, at a cost of about $9 million. The system works as follows: the East and Southern African trains pull into the facility in parallel within meters of each other. A crane is then used to move containers from one train to the other. The whole operation takes just a few hours. The goods are then moved by train to lake Victoria where they are loaded on to a container vessel for onward transportation to Uganda. The trains take only seven days from Johannesburg to Kidatu and another three days from Kidatu to Kampala. This also ensures quicker delivery of goods destined for Rwanda and Burundi. There are plans to extend this service to Kenya.

110. Previously, the bulk of this $600 million a year trade between Southern and East Africa moved largely over a much longer route from Johannesburg to the port of Durban in South Africa, then by coastal vessel from Durban to the port of Mombasa in Kenya, from where the goods were moved by road or rail to Uganda. The whole movement from origin to destination took at least one month. The problems of transit from the East African coast to the hinterland are well documented. Thus, an innovative private–sector–led initiative has provided a solution to a major constraint and not only eased trade but also created the potential for increased trade between two regions in Africa.

(a) An integrated regional approach key to rail success

111. Express container trains are also operating between Johannesburg and Dar-es Salaam through what is known as the "East African Container Service". Although this service involves cooperation among six rail systems, in practice the consumer need only deal with one, thanks in part to the cooperation that has been fostered amongst the railways of Southern Africa.

112. Despite this operation involving six railway systems – Spoornet (the South African railway system), Botswana Railways, National Railways of Zimbabwe, Zambia Railways, TAZARA and Uganda Railways - for the shipper it nonetheless provides a single through service thanks to the cooperation among the railways of southern Africa. From a cooperation arrangement facilitated by the Southern Africa Transport and Communications Commission (SATCC), the southern African railways have moved to closer integration through the Southern African Railways Association (SARA). SARA is a regional association which brings together the Southern African railways. SARA's aim is to promote rail revatilization and the viability of railways. To achieve this, a comprehensive framework for cooperation has been put in place over many years and is now yielding results. For the major rail corridors in the region, Corridor Planning Groups (CPGs) have been established. Their mandate is to formulate strategies for long-term sustainability of the railways, as well to concentrate on customer centered service delivery. Below the CPGs are the Corridor Management Groups (CMGs). These deal with the more operational issues on the ground intended to foster technical, operational and commercial coordination. From time to time, Specialist Committees are set up to deal with specific tasks or special projects.

113. Among the successes of the railways of the Southern African region are:

- international train timetables
- through train movements
- harmonization of key performance indicators and agreement on basic performance standards
- cross-border working of trains and in some cases crew
- single interchange and single inspections at borders
- backloading of wagons

114. The successful completion of the Rolling Stock Information System (RSIS), an integrated train operations management system, is expected to improve railway operations further. RSIS is an integration of two information systems, the UNCTAD Advance Cargo Information System (ACIS) and South Africa's SPRINT System.

115. At the institutional level, Southern African railways have established SARA, whose headquarters have been set up in Harare, Zimbabwe, with an Executive Director appointed. All participating railways make annual contributions to support the operations of SARA.

(b) Private sector participation

116. Southern Africa also offers a good model for the participation of the private sector in rail operations. The first cross-border rail concession is likely to be concluded soon with the award of a concession to a group of regional and international investors for the entire Malawi Railways network. The same group won the bid for the operation of the adjacent Mozambique northern rail system, CFM (North). Nacala is the natural port for Malawi, and this cross-border concession, which was made possible by political goodwill between the two countries and close cooperation between two rail systems in Malawi and Mozambique, will enable the provision of a through cross-border regional rail service. It should lead to a more efficient service for Malawi's international trade.

117. Another major development is the construction of the privately owned Beitbridge-Bulawayo Railway Line. This line, which is wholly owned and financed by a consortium of private investors from the region, cuts the distance between South Africa and the southern part of Zimbabwe and consequently to countries to the north like Zambia, DRC and Tanzania, by about 200 kilometers. Such private sector involvement is not only changing the conduct of railway business in the Southern African region, but also offers prospects for improved rail efficiency in Africa, which should lead to a more customer focussed service. It also offers lessons for East Africa.

XIII. ROAD INFRASTRUCTURE AND MANAGEMENT

118. The bulk of traffic, including transit in East and Southern Africa, moves by road. Thus, improving the performance of road transport is critical to improving the performance of transit transport systems in both regions. There are two categories of issues facing road transport in the two regions: those related to road infrastructure, and those to do with the road transport industry.

A. Road infrastructure

119. There are at least five major issues that are important in assessing the performance of the road systems in the two regions. These are:

- Condition of roads and capital investment
- Standards and specifications
- Maintenance
- Management practices
- Overload management

1. Conditions of roads and capital investment

120. There are large variations in the condition of roads between East and Southern Africa and amongst countries. This is due to a combination of factors, among them differing design, construction and maintenance standards; differing management practices; and differences in cost-recovery systems and resource allocations to roads.

121. There are also a number of critical missing links along the transport corridors in the regions. In Southern Africa, examples include the link between Botswana and Zambia at Kazungula. Although this is a busy border crossing point with high large numbers of HGVs, the link is still serviced by a ferry. The border delays of up to 24 hours experienced on this link are in large part because of the ferry system. A long-term solution would be to construct a bridge to replace the existing ferry service. A similar situation prevails between Namibia and Zambia at Katima Mulilo.

2. Standards and specifications

122. For road transit corridors to operate efficiently, they need to have common standards and specifications in terms of, among other things, design; construction; road signs and markings; and overload control. Unless these standards are harmonised, it becomes difficult to organize transport services as vehicles registered in one country may be prohibited from entering other countries because, from example they exceed e.g. axle load limits in those countries. Both regions are working towards this eventuality. The East African Cooperation Treaty identifies infrastructure as a priority area. The emphasis in cooperation in infrastructure and support services is on improving existing links and establishing new ones. The Tripartite Agreement on Road Transport calls for, among other things, common standards in road transport and safety, documentation and procedures and a coordinated approach to the implementation of road projects. In Southern Africa, a regional trunk road network has been designated as part of the Protocol on Transport, as well as common road standards and specifications. The challenge is to move from agreement to implementation.

3. Maintenance

123. The biggest problem with roads in Africa in general and in East and Southern Africa (with the exception of a few countries such as Botswana, South Africa, Namibia and Zimbabwe) is poor maintenance. The asset value of roads in Africa is being eroded rapidly due to poor maintenance. Poor road conditions are not only economic costs, in terms of asset deprecation, but also in terms of high transport costs.

124. Deferred maintenance has taken its toll on the roads. The cost of deferred maintenance for the Southern Africa region in estimated at $1.2 billion, or 13% of the asset value of SADC roads. Faced with deteriorating road conditions and declining budgets, as well as pressure multilateral bodies, Governments of the region have had little choice but to reform. The condition of paved roads in good condition is only 56%, with 24% classified as being in fair condition and 20% in poor condition. For unpaved roads, the situation is even worse: only 22% of the roads are in good condition, with 32% in fair condition and 46% in poor condition.[12]

125. There is another factor that has resulted in the rapid deterioration of the region's road network, and that is the shift of traffic from rail to road. Railways of the region are facing a decline in traffic. Road transport now commands between 70 to 80 percent of the regional traffic. Thus, bulk cargoes such as copper, coal and grains are increasingly being transported by road over long distances. In addition, the payload on trucks is increasing. The end result is severe

[12] Southern African Development Community - Transport and Communications Report - February 1997

overloading, leading to considerable damage to the RTRN. Weak enforcement and poorly paid public workers (and therefore incidences of corruption) have exacerbated the situation.

126. Reforms in the road infrastructure are therefore aimed at cost recovery based on economic criteria to have sufficient resources to maintain roads. The other factor involved is the need to improve the quality and cost effectiveness of road maintenance. It is estimated that savings of up to 25% can be realized from out-sourcing instead of the roads departments carrying out their own in-house maintenance (force account). The region is also considering a harmonized methodology for cost recovery, at least for the RTRN.

127. Most road reforms in Africa have been influenced by declining government budgets, deteriorating road conditions and in some cases, such as parts of East and West Africa, roads becoming so bad as to become a real hindrance to trade. The reforms have been spurred by the World Bank's Road Maintenance Initiative (RMI), whose major thrust is to create autonomous road agencies and dedicated road funds.[13] Progress has been made in this respect, as well as in involving the private sector in the management of the road sector. Road Boards have been established in Malawi, Namibia, South Africa and Zambia. A common feature of these boards is that they have high private sector representation. For example, the board in Zambia has more private than public sector members. Road Funds are operational in Lesotho, Malawi, Namibia and Zambia. These are generally funded from a fuel levy. Countries are yet to diversify the sources of funding for the boards to include other road user charges. There is debate and differing schools of thought on the merits and de-merits of setting up a regional road fund for the RTRN. The overriding concern seems to be reluctance by Governments to cede their control of roads to a "supranational" regional body.

128. Almost all countries are increasingly using the private sector for maintenance work through out-sourcing instead of relying on force account. This approach is not only cost effective, but has in most instances improved the quality of road maintenance. The challenge facing most Governments is how best to assist the local private sector construction industry, which has a high employment generation potential, to grow and to be sustainable.

4. Management practices

129. As a result of the ongoing reforms, the role of government is changing. Governments are "rolling back" to concentrate their new role of policy/strategy development and monitoring. They are encouraging the establishment of autonomous regulatory agencies and expanding the role of the private sector. Although progress varies country to country and from sector to sector, overall the region has made good progress in pushing forward reforms. Enabling frameworks have been created and reforms are ongoing in various transport subsectors – as well as in defining the institutional framework, national and regional, for implementing the reforms. Both regions have moved from a situation where road policies were characterised by: state provision of roads; insufficient dialogue with end users; supply-led rather demand-driven provision and generally inadequate policies; to providing a framework for the commercial management of roads incorporating public and private sector stakeholders; and ensuring adequate and stable supply of funds to the roads sector.

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[13] Managing and Financing Roads: An Agenda for Reform - Ian Heggie, March 1997 - Sub-Saharan Africa Transport Policy Program, - The World and Economic Commission for Africa

130. Increasingly, countries in both regions are using the local private sector for maintenance work through out-sourcing instead of relying on force account. This approach is not only cost effective, but has in most instances improved the quality of road maintenance. The challenge facing most Governments is how best to assist the local private sector construction industry, which has a high employment generation potential, to grow and to become sustainable.

5. Overload control

131. A major factor and problem for the road network in Africa is gross overloading. In East and Southern Africa, poor performance by railways has resulted in a shift of traffic from road to rail. Thus, bulk cargoes such as steel, copper, coal, timber and grains are increasingly being transported by road over long distances. In addition, the payload on trucks is increasing. The end result is severe overloading, leading to considerable damage to the major road networks. Most regions of Africa are yet to agree on harmonized road design standards and therefore axle load limits and cost recovery mechanisms. Weak legislation, enforcement and poorly paid public workers have exacerbated the situation. In Southern Africa, there have been proposals for the private sector to be involved in weigh-bridge management and overload control. In practice, apart from experiments in countries like Zambia, this is yet to happen on a large-scale sustainable basis. Comparison of payloads between Africa and the rest of the world shows that, despite poor road conditions, legislated payload limits are surprisingly high in Africa.

Table 9
Comparative gross combination mass and payload limits for selected countries

COUNTRY	GCM (Tonnes)	PAYLOAD (Tonnes)
AFRICA		
▪ South Africa	56.0	36.0
▪ Zambia	55.0	35.0
▪ Zimbabwe	55.0	35.0
▪ Botswana	50.2	30.2
▪ Angola	38.0	18.0
CANADA	53.5-63.5	33.5-43.4
USA	36.4-48.0	16.4-28.0
UK	38.0	18.0
AUSTRALIA	50.4	30.4

Source: (Southern African Railways Association) Strategy for Promoting Fair Competition and the Viability of Railways in the SADC Region – Eng. Remmy Makumbe – General Secretary.

B. Road transport

132. A number of factors impact on road transport operations in the two regions. The major factors are:

- Market entry and competition
- Transit facilitation
- Road accidents
- HIV/AIDS

1. Market entry and competition

133. Although most countries have liberalised their road transport industries internally both for passenger and freight, the same cannot be said in terms of opening up the market at the level of the region. A major hindrance to the growth of the road transport industry in the two regions is protective practices, not just by Governments, but by the freight industry itself. Cross-border operations are restricted through a cumbersome system of permits. The permit system not only controls market entry, but also limits competition. The result is sub-optimal utilization of the region's transport capacity. Often, national road transport associations lobby Governments to maintain this control so as to preserve their market share.

2. Transit facilitation

134. As elaborated in the foregoing, transit facilitation along the transport corridors in the two regions remains problematic. There are a multiplicity of factors that affect transit. These include, cumbersome documentation and procedures, unharmonised transit charges, border crossing delays, poor condition of roads, "unilateral" security checks and road blocks, to mention but some. These issues are well documented in a number studies that have been done in the past on transit transport.

3. Road accidents

135. Road accidents are becoming a major problem on transit corridors, particularly in East Africa. This is due to a combination of bad road conditions, poor road signs and markings (on a number of transit corridors in both regions, there are not even road markings to separate lanes, let alone road signs, and this poses a major hazard, particularly for night driving), poor condition of vehicles and poor driver training and competence.

136. Another cause of road accidents is stray animals, both domestic and wildlife, on the roads. This is particularly prevelant in countries like Botswana and Namibia. General upkeep of the roads also contributes to accidents. In some countries such as Zambia, road shoulders along the major roads are rarely cleared. This makes visibility difficult, as well as a making it difficult to find parking off the road in the event of a breakdown. Often broken-down vehicles are parked on the roads, and this poses a major road hazard. From the foregoing, it is evident that there are relatively inexpensive solutions that can be put in place to address factors that contribute to road accidents, thereby reducing the economic and human cost of these accidents.

4. HIV/AIDS

137. Studies have shown that increased cross-border mobility leads to higher incidences of HIV/AIDS. In particular, they have shown that drivers who operate long distances on the transit corridors are at relatively higher risk of contracting HIV/AIDS than other population categories generally. Unfortunately, this also means that the disease tends to spread along the transit corridors, with concentrations around border posts. There are a number of initiatives to educate both drivers and populations along the corridors. In this respect, private sector national road transport associations are playing an important role. A case in point is the South African Road Transport Operators Association, which has embarked on a systematic and concerted education and awareness raising campaign amongst its drivers.

5. Need to transform road transport

138. The problems with road transport relate largely to difficulties in obtaining cross-border permits, poor condition of vehicles, poor driver training and poor working conditions, high accident rates due to poor road safety training and awareness, and weak enforcement due to inadequate laws and corruption.

139. For road transport to function effectively and be the catalyst that it has been in Africa's trade and development, it needs to be streamlined so it can operate effectively and efficiently. Among the measures required are: liberalization of the market so as to promote cross border operations; simplification of systems for permits; harmonization of legislation related to road safety, driver training and testing and licensing; harmonization of transit charges; improved overload control; and generally improved enforcement. There is in addition the difficult issue of cost recovery and user charges – their levels, application, collection and utilization.

XIV. ISSUES AND DEVELOPMENTS

A. Policy and legal framework for transit transport

140. In both East and Southern Africa, the basic policy and institutional framework for transit transport cooperation exists. This is through bilateral and multilateral agreements. Table 9 provides is a sample of the provisions in the main Treaties and Protocols in East and Southern Africa. All the Treaties, Protocols and Agreements lay emphasis on the facilitation of transit traffic and, in particular, according access to land-locked countries. Thus, transit traffic constraints in the two regions are prevalent not because of lack of a policy and legal framework, but because of poor implementation of the resultant provisions.

Table 9
Legal framework for transit-transport in East and Southern Africa

East Africa

TREATY/AGREEMENT	SELECTED PROVISIONS
East African Community Treaty	Chapter 15 of the Treaty – Cooperation in Infrastructure and Services, Article 89 - Common Transport and Communications Policies - states that Partner States shall take steps, inter alia, to: ▪ Develop harmonised standards and regulatory laws, rules, procedures and practices ▪ Grant special treatment to land-locked partner States in respect of the application of the provisions in this chapter ▪ Provide security and protection to transport systems to ensure the smooth movement of goods and persons within the community Article 95 on Multi-modal Transport states among other things that Partner States shall: ▪ Harmonise and simplify regulations, goods classification, procedures and documents required for multi-modal transport within the community ▪ Provide where feasible, technical and other facilities for direct trans-shipment of goods at main trans-shipment points,

	including intermodal cargo exchange points, inland clearance depots, dry ports or inland container depots ▪ Take measures to ratify or accede to international conventions on multimodal transport and containerisation and take such steps as may be necessary to implement them ▪ Promote communication and infromation exchange to enhance the efficiency of multimodal transport.
East African Community Development Strategy, 2001-2005	One of the key elements is Section 4.4-Cooperation in Infrastructure and Supportive Services: ▪ Harmonise and simplify regulations, goods classification, procedure and documentation required for multi-modal transport within the community ▪ Encourage the establishment of freight booking centres and harmonise registration and licensing requirements for freight forwarders, customs clearing agents and shipping agents
Northern Corridor Transit Agreement	▪ Multilateral agreement with emphasis on facilitation of transit traffic ▪ Various Technical and Working Committees ▪ Transit Agreements

Source: InfraAfrica Consultants (From EAC Treaty/Strategy)

Southern Africa

TREATY/AGREEMENT	SELECTED PROVISIONS
Declaration Treaty and Protocol of the Southern African Development Community	Chapter Seven, Article 21 lists infrastructure and services as one of the major areas of cooperation Article 22 on Protocols states: ▪ Member States shall conclude such Protocols as may be necessary in each area of cooperation, which shall spell out the objectives and scope of, and institutional mechanisms for, cooperation and integration
SADC Protocol on Transport, Communications and Meteorology	Chapter 2, Article 2.4 – Strategic Goals-lists, among others, the following: ▪ Integration of regional transport, communications and meteorology networks to be facilitated by the implementation of compatible policies, legislation, rules standards and procedures ▪ Elimination or reduction of hindrances and impediments to the movement of persons, goods, equipment and services Chapter 3 – Integrated Transport provisions include: ▪ The right of freedom of transit for persons and goods ▪ The right of land-locked Member States to unimpeded access to and from the sea ▪ Cooperation in providing, operating and maintaining transport infrastructure which supports the provision of integrated transport services, considering that infrastructure

	should progressively be self-sustaining, with funding based on a user pay principle ▪ Creation of regulatory frameworks, investment regimes and incentives which may facilitate the provision of such infrastructure by the private and/or public sector ▪ Establishment of institutional frameworks involving all transport modes to promote inter and intra-modal co-operation between stakeholders and to support the development of regional development corridors facilitating unimpeded access and travel between the territories of Member States
Bilateral Agreements/Working Arrangements	▪ Bilateral road transport agreements ▪ The "Package of Border Post Legal Reforms" which includes Memorandum of Understanding on One-Stop-Border Posts; model legislative provisions to enable Member States to implement the MOU; a model bilateral agreement on the operation and management of border posts along a common border; modalities for private sector participation ▪ Working Group on One-Stop-Border Posts ▪ Corridor Planning Committees ▪ Route Management Groups ▪ Railway Corridor Planning Groups ▪ Railway Corridor Management Groups
SADC Protocol on Trade	Provisions that impact on transit transport and facilitation are in Part Three – Customs Procedures – Articles 13, 14 and 15, on Co-operation in Customs Matters, Trade Facilitation and Transit Trade respectively, which state: ▪ Member States shall, as provided in Annex II of this Protocol, take appropriate measures, including arrangements regarding Customs administration and cooperation, to ensure that the provisions of this Protocol are effectively and harmoniously applied ▪ Member States shall, as provided for in Annex III of this Protocol, take such measures as are necessary to facilitate the simplification and harmonisation of trade documentation and procedures ▪ Products imported into or exported from a Member State shall, as provided for in Annex IV of this Protocol, enjoy freedom of transit within the Community and shall only be subject to the payment of the normal rates for services rendered

Source: InfraAfrica Consultants (from SADC Treaty and SADC Trade and Transport Protocols)

141. In East Africa, the East African Community Treaty and the second East African Community Development Strategy (2001-2005) have provisions intended to improve transit transport. The Northern Corridor Transit Agreement (NCTA), which has been under implementation for some years now, is specifically intended to facilitate the smooth flow of transit traffic along the Northern Corridor from the port of Mombasa to Uganda, Rwanda, Burundi and Eastern DRC. In practice, poor transit and cross-border facilitation and unilateral actions by countries have limited the effectiveness this agreement.

142. Southern African countries have concluded a comprehensive regional agreement in the form of the Protocol on Transport, Communications and Meteorology (PTCM). The Protocol was signed in August 1996 and ratified by the majority of the SADC member countries in July 1998, making it legally binding on all countries. Among other provisions, the Protocol provides for the operation of an integrated regional transport system, including improved transit facilitation. Various annexes to the Protocol have also been concluded, such as those related to harmonisation of road standards and specifications and improved border post facilitation. As is the case for East Africa, although there has been some movement towards implementing the agreed measures, in practice, the pace has been slow and implementation fragmented across countries. The overall effect has been to limit impact of these agreements in improving transit facilitation.

B. Institutional capacity constraints – a limiting factor

143. Institutions in most African countries are fragile and have limited capacity in terms of systems, skills and ability to be sustainable. East and Southern Africa are no exceptions to this state of affairs. This is not to suggest that Africa lacks skills but, rather, that available scarce skills are not optimally harnessed and are too thinly spread.

144. In addition, it was only a decade and a half ago that most African countries shifted from command economies to open market economies. The orientation of previous institutions and the work ethic of staff centred on control and political hegemony. Now, the same institutions and staff must manage an open and transparent economic system and move away from control to facilitation and accountability. This is a fundamental shift that requires re-orientation, not only of institutional structures and systems, but also of the "mindset" of those involved.

145. Thus, unless key institutions mandated with the responsibility of formulating transit transport systems, as well as implementation of the said policies and strategies, are strengthened by addressing the three key issues of systems, skills and sustainability, the impact of various measures and initiatives will remain limited. The institutions include key government ministries and departments, such as ministries of transport, transit transport authorities such as the NCTA, and regional organisations such as SATCC, EAC and COMESA.

146. Another factor related to poor implementation is the lack of well-constituted and effective institutional structures or frameworks to address transit transport issues. In most countries, structures such as National Trade Facilitation Committees that had been set up with the assistance of agencies such as UNCTAD are either no longer in existence or no longer active in the absence of external financial support. Within the SADC Trade and Transport Protocols, elaborate institutional frameworks have been defined, including the Corridor Planning Committees, Integrated Transport Committees, Trade Facilitation and Customs Cooperation Committees and Route Management Groups. All these are still in formative stages and, hence, the institutional frameworks to address transit transport issues continue to be absent, ad hoc or weak, with limited capacity to translate agreements into actions on the ground. This needs to change if transit transport is to improve.

C. Legal and institutional reforms

147. For the various reforms and transit transport improvement measures to be effective, they need to be translated and incorporated into national laws or policies so that they become binding and enforceable by law at the national level. This has often been missing and, in part, explains why Governments may sometimes take unilateral actions. However, translating bilateral or multilateral agreements into national laws is a laborious process that requires resources, skills and time.

148. This process normally requires the following steps:

- Reviewing national laws to determine which ones are not compatible or need to be brought in line with the various bilateral or regional agreements
- Obtaining consensus and buy-in from various parties (as there are often overlapping jurisdictions and responsibilities across institutions which need to be properly managed)
- Drafting the new legislation
- Depending on the issue, obtaining Cabinet and sometimes Parliamentary approvals
- Issuing statutory instruments to convert the new legislation into law and repeal the old legislation
- Taking measures to educate stakeholders on the new law and ensuring that it is enforceable
- Monitoring compliance and impact (something which is rarely done, if at all)

149. In the absence of support from cooperating partners, it is often difficult for countries to undertake these steps on their own. This is not to suggest that these countries cannot take some measures without external support, but to indicate that, left on their own, countries are unlikely to move at the required pace. The conclusion of the Protocol in Southern Africa is a case in point. Although the thrust and content of the Protocol derived from the countries of Southern Africa, resources from cooperating partners helped to move the process at a faster pace than would have been possible without this support. Subsequently, Much more assistance is needed to support the implementation process.

D. Inappropriate implementation frameworks

150. Apart from weak institutional structures and consequently implementation capacity, another major weakness in addressing transit transport facilitation is the fact that, over the years, there have been too many studies, workshops and other gatherings, with very little implementation frameworks or blue-prints. This is not to suggest that all the studies and workshops were unnecessary. On the contrary, some achieved the desired results. It is the multiplicity of studies and regional gatherings that is of concern. Unfortunately, the blame for this cannot be attributed to any one party, but is a combination of factors emanating from donor agencies, international organisations and even Governments. What the two regions need is not a multiplicity of studies and workshops, but support for implementation. To achieve this, the following steps are necessary:

- A clear diagonistic assessment of issues and constraints affecting transit transport, not in general terms, but in specific terms
- Definition of clear baselines, benchmarks and targets so as to provide a basis for measuring success or lack of it

- A Step-by-Step implementation guideline clearly stating the measures and steps required to address the issue/constraint with clear indications of responsibility and time frames – a sort of "Road Map" for implementation
- Systematic and sustainable and transparent frameworks for monitoring progress and impact with periodic reporting
- Public/private fora to facilitate dialogue and partnership in addressing issues and constraints with emphasis on accountability and transparency

E. Sub-optimal resource utilisation and limited donor coordination

151. Related to the issue of multiplicity of studies above is poor coordination across regional institutions, donors and even governments. For example, apart from the overlap of membership between COMESA and SADC, where nine (Angola, DRC, Malawi, Mauritius, Namibia, Seychelles, Swaziland, Zambia and Zimbabwe) out of the 14 SADC countries also belong to COMESA, there is limited coordination of programmes in general and transit transport interventions in particular. Obvious areas of overlap include:

- Transit charges
- Overload limits
- Transit bonds
- Customs documentation and procedures

152. Although attempts have been made in the past for the two institutions to work together in such areas as transit insurance (where SADC countries have agreed to adopt the COMESA Yellow Card or Third Party Motor Vehicle Insurance Scheme) and customs documentation (where agreement has been reached on using the Single Administrative Document – SAD), in practice, this agreement has not been translated into implementation on the ground.

153. There are a number of donors and other agencies active in both the Eastern and Southern African regions in transport. These include UNCTAD, USAID (United States Agency for International Development), DFID (Department for International Development), the European Union (EU), the Development Bank of Southern Africa (DBSA), the German Agency for Technical Cooperation (GTZ) and the Nordic countries, to name some. Despite the multiplicity of donors, the regional bodies involved (COMESA, EAC, SADC) have made little attempt to establish effective donor coordination mechanisms. Nor have the donors themselves come together to ensure that there is coordination in the targeting of programmes and projects and in the utilisation of scarce resources. Whatever coordination arrangements exist tend to be ad hoc rather than systematic. The result of all this is:

- One donor not knowing what the other is doing
- Duplication of activities and effort by the regional institutions
- Poor targeting of resources, with resources thinly spread across a host of programmes with little prioritisation
- Inability to mobilise resources to address key priority areas

154. The solution is clearly more effective coordination across the regional bodies, particularly SADC and COMESA, and creation of a donor coordinating mechanism on transit transport.

F. Public/private partnerships

155. Transit transport issues need to be elevated in the regional integration agenda in both East and Southern Africa. While there is some dialogue in both regions within Governments, within the private sector and sometimes involving Governments and the private sector in a few functioning bilateral route management committees, this has not taken root and has, thus far, tended be "crisis driven".

156. While some progress may have been made, dialogue on transit transport issues needs to be more visible and systematic and should be driven by the private sector through their respective industry and trade associations. Among the associations that can play this role are:

- Federation of Eastern and Southern African Road Transport Associations (FESARTA)
- Association of Southern African National Road Agencies (ASANRA)
- Southern African Railways Association (SARA)
- Port Management Association for Eastern and Southern Africa (PMAESA)
- Federation of Clearing and Forwarding Associations of Southern Africa (FCFASA)
- Cross-Border Traders Association (CBTA)
- Association of SADC Chambers of Commerce and Industry (ASCCI) and
- Southern African Enterprise Network (SAEN)
- East African Enterprise Network (EAEN)

157. FESARTA and PMAESA have membership in both East and Southern Africa. There is already close collaboration between the enterprise networks. The CBTA also has membership in East Africa. There is no reason, for example, why chambers of commerce in East Africa cannot come together to form a regional association, as has been done in Southern Africa. All these industry associations can potentially become strong advocates for transit transport efficiency improvement. However, for this to happen, there needs to be a deliberate effort to ensure that transit transport issues gain prominence among these bodies and that they are convinced of the benefits of improved transit transport.

158. These emerging private sector trade and industry associations lack capacity and resources to articulate policy options effectively and to engage in effective dialogue with governments. This is because they lack resources (both financial and expertise) to enable them to organise effectively and to improve networking and information sharing amongst themselves. Consequently, they tend to be reactive rather than proactive in their interactions with Governments and in contributing to the shaping of national and regional policies.

159. Strengthening the capacity of regional trade and industry associations so that they can become credible partners in promoting public/private sector dialogue and shaping regional policies and playing a strong advocacy role in accelerating reforms is critical to improving transit facilitation. The associations would also promote an open atmosphere and accountability by putting pressure on various government departments to be transparent in their operations.

G. Information sharing and dissemination

160. A current shortcoming in terms of improving transit transport facilitation is lack of a central depository or integrated information source on transit transport. An accurate and regularly updated information source should cover, among other things:

- The condition of the major transit systems
- Prevailing charges
- Transit requirements
- Axle load limits
- Documentation requirements
- New administrative measures etc.

This would go a long way to making users of transit transport corridors better informed and therefore better and smarter users. Costly delays at border posts and en route are often the result of users who are not informed about the requirements of using a particular transit corridor. A relatively minimal investment in such a system would have an enormous impact on transit facilitation, reducing delays and ultimately costs.

161. A recent survey undertaken by the then Federation of Regional Road Freight Associations (FRRFA), now the Federation of Eastern and Southern African Road Transport Associations (FESARTA), revealed that problems of border delays are not caused by customs and other border authorities alone. The study showed that drivers and truck owners were also responsible for a large part of the problem. The issues uncovered included:

- Incorrect documents
- Incomplete documents
- Inability by the drivers to understand the procedures, leading sometimes to depositing the wrong documents at the wrong border posts
- Inadequate funds to cover transit and other charges

162. The study recommended training of drivers and truck owners as an important means of addressing this situation. In addition, a regularly updated manual and electronic information system would go a long way to addressing these major constraints. Unfortunately, these are the sort of relatively simple administrative solutions that donors and others involved in transit transport have not paid much attention to.

H. Infrastructure improvements and financing

163. For smooth flow of transit traffic, there is a need for a similar quality of infrastructure along a particular corridor. This investment needed to improve transit transport systems and facilities is well documented. An includes, rehabilitation of infrastructure, new investment to increase capacity, bridging critical missing links, providing basic facilities at border posts and bringing technological solutions such as IT to bear on transit constraints.

164. This requires large investments in upgrading some of the poor sections of the designated regional road systems which are still earth, gravel or light bitumen surfaced, as well as dealing with the huge backlog of maintenance, which, as an example in the SADC countries, is estimated at over US$ 6 billion for roads. This high cost is a result of inadequate funding and poor management of infrastructure, coupled with unchecked overloading in the case of roads. This is clearly an area where the private sector can and should play a leading role. There are signs that the private sector is taking up the challenge, but this process needs to be accelerated.

165. Financing and managing infrastructure has in the past been the responsibility of Governments, supported by donors. This approach is no longer sustainable, since most of the governments do not, on their own, have the funds needed for improvement of infrastructure. Funds from donors have also dwindled or are being diverted to social services such as education, health and other direct poverty-alleviation-related projects. Furthermore, a critical need has been identified to inject a business approach and discipline into the management or running of infrastructure services. Consequently, Governments have been compelled to seek new partnerships with the private sector, which has proved able to provide supportive capital investment and the needed business skills and change in the management culture.

166. In order to attract the much needed participation of the private sector in investing in and operating infrastructure services, it is necessary to create a conducive environment that will not only provide incentives but reduce their risk exposure. This normally requires comprehensive policy, legal, regulatory and institutional reforms. This process has already began in some countries, but it needs to be enhanced and accelerated.

166. Some reforms are already being implemented. For example, in the roads sector, the reforms entail "commercialisation of roads" by applying the user-pay-principle; establishment of dedicated road funds managed by a board, with majority representation of the private sector; establishment of autonomous road agencies or authorities operating on sound business principles; and clarifying the responsibilities of the different institutions involved. In railways, ports and maritime and inland water transport, the reforms involve concessioning of the improvement and operation of the facilities to the private sector, and establishing regulatory authorities to oversee fair play by the new entrants.

168. The SADC Transport Investment Forum, held in Windhoek, Namibia in April 2001 under the auspices of SATCC, is an example of the new approach required to mobilise investment for infrastructure rehabilitation. The Forum brought together private sector investors, service providers and relevant government institutions (privatisation agencies, investment promotion agencies and key ministries). The Forum helped Governments to learn first hand the requirements of investors and investors in turn were exposed to the immense opportunities available for investment in the infrastructure sector. Such gatherings should not be seen as a one-off event, but as part of a process. A follow-up to the SADC Transport Investment Forum could be to convene a forum specific to transit transport improvements. A similar event could also be convened for East Africa.

I. Transit facilitation measures and initiatives

169. There has not been any shortage of measures and initiatives to improve the facilitation of transit traffic. COMESA, EAC, NCTA and SADC all have various measures that are in place or planned to address transit facilitation. Unfortunately, the major problem has been poor implementation for the reasons cited above. The status of these measures is either one or a combination of the following:

- Measures are being implemented by some countries and not others
- There is partial implementation of the concept or measure
- Improvements have been achieved in some transport corridors and not others
- Agreement has been reached in principle, but implementation is yet to commence

- Countries are in the process or have yet to commence the process of changing national policies, laws and practices to conform to the agreed measures
- Capacity and resource constraints have stalled implementation
- There is no system in place for monitoring and tracking progress, and countries are therefore not well informed of progress being achieved and impediments to implementation
- There are no targets to aspire to and therefore implementation is at best "forced" on the countries or done to "keep up" with other countries, without a real commitment by the countries concerned.

170. As indicated above, one of the biggest shortcomings in undertaking measures to improve transit transport is the absence of benchmarks and monitoring systems to be able to accurately assess the status of implementation of various measures and therefore target interventions to achieve the desired results. There are a number of measures to address transit transport facilitation in the two regions, as described below:

(a) Harmonised road transit charges

171. The Harmonized Road Transit Charges introduced in 1991 are currently operational in Burundi, Ethiopia, Kenya, Malawi, Rwanda, Sudan, Uganda, Tanzania, Zambia and Zimbabwe. They are a standardized transit charging system. One of the weaknesses currently is that there is no system of pre-payment, and each country administers its own methodology.

172. The agreed levels of transit charges within COMESA are as follows:

- US$10 per 100 kilometers for HGV with more than three axles
- US$ 6 per 100 kilometers for rigid HGV
- US$5 per 100 kilometers for buses carrying more than twenty five passengers

173. According to COMESA, the replacement of ad hoc administrative charges with uniform rates has introduced transparency, stability and predictability in transport costs. Yet, transit charges are an area where countries have continued to take unilateral national actions despite regional agreements. Currently, there are two different charges which have been approved for COMESA and SADC. The COMESA member countries approved, and 10 of them are implementing, a uniform average charge for all countries on the basis of road usage and damage caused by heavy goods vehicles.

174. The SADC Member States, on the other hand, have approved a country-specific charge, based on a uniform methodology and cost inputs, but acknowledging the difference in the design and standard of roads and the unit costs of road maintenance. Although a number of COMESA countries have implemented their approved system, the expected comprehensive implementation of a single agreed and consistent system is still to occur. This has, thus, limited whatever benefits may potentially have accrued. This is clearly an area where closer coordination between SADC and COMESA would have enhanced the benefits of introducing a new system

(b) Transit bonds

175. Equally, a number of countries administer a system of cash deposits as bonds for transit traffic. Cash bonds are intended to deter dumping of goods in transit into domestic markets in the transit countries to circumvent payment of customs duties. Unfortunately, apart from tying up large amounts of cash, this system is cumbersome and prone to all sorts of abuse. It is surprising that potential solutions such as transit insurance guaranteed by a financial institution in lieu of cash bonds have not been attempted. This is an area, like general insurance, where the private sector should be able to take the lead.

176. The are various problems associated with the current system of charging and/or collection of transit charges and the cash transit bonds. Among the issues are:

- Their administration is often arbitrary and prone to abuse;
- There is often little transparency in the manner these charges are administered;
- The system creates opportunities for fraud and corruption.

177. The solution in the long term is to move away from cash-based systems to systems that are harmonised, transparent and easy to manage and that are based on measures other than cash. This is another area where private-sector-led solutions based on information technology (IT) can provide viable and sustainable solutions.

(c) Regional customs bond guarantee

178. Currently, the practice in Eastern and Southern Africa is that goods in transit must be secured by cash bonds. Often, clearing and forwarding agents (C&F agents) maintain large cash bonds with customs authorities in the respective countries. Apart from tying up large amounts of cash (estimated by COMESA to be in the region of US$ 1.2 billion tied up in commercial banks and insurance companies)[14] that could be used for other purposes, the system is also cumbersome to administer. For some time now, COMESA has been proposing a Regional Customs Bond Guarantee (RCBG) intended to eliminate these cash guarantees. Despite being under consideration for some years now, the RCBG scheme is yet to take effect.

(d) Cross-border insurance

179. The "COMESA Yellow Card" or the Third Party Regional Motor Vehicle Insurance Scheme is a success story in terms of an innovative approach to transit facilitation. The scheme works in both East and Southern Africa. The added advantage is that the agreement allows non-members of COMESA to participate in the scheme. Plans are under way to extend the scheme to countries in Southern Africa currently not using the scheme, such as Mozambique and the SACU countries (Botswana, Lesotho, Namibia, Swaziland and South Africa). In West Africa a similar scheme, the "Brown Card", is in use.

180. The Yellow Card allows pre-purchase of insurance in local currency at point of origin and the insurance is honored by all participating countries. This means, for example, that a motorist or trucker travelling from Zimbabwe to Uganda who has to traverse Zambia, Tanzania and Kenya need not stop at each border post to purchase insurance, but uses the Yellow Card to gain access

[14] COMESA Transit Transport Facilitation Programme – Projects for Implementation, COMESA Secretariat, Lusaka, April 2001

and cover. In the event of an accident in a third country, the motorist is covered for third party liability, property damage and basic medical cover. The convenience and facilitative role of such a system are evident. According to COMESA, the Yellow Card has, since its inception, generated revenue worth $2 million, with only $200,000 worth of claims processed.

181. Among the benefits of the Yellow Card are that, it:

- is used widely in East and Southern Africa by private motorists and heavy goods vehicles
- can be bought at source in the country of origin and therefore avoids the need for cash payments in transit
- is transparent and well recognised in the two regions
- covers the motorist in all countries transited including, both the country of origin and destination
- has a well developed system of Bureaux which administer the system in each country
- is driven by the private sector and is self-sustaining.

182. The Yellow Card is illustrative of the fact that, provided there is a recognised need, commitment and partnership between the public and private sector, the transit transport problems identified in the foregoing are not insurmountable. A study has been carried out recently to examine what measures need to be taken to improve its working and extend it to the other non-member countries, especially in Southern Africa. The study also examined the comparative advantages of the Yellow card system with the other system in use in the SACU countries. The recommendations of the study are being considered in the concerned countries.

(e) Common customs documentation and procedures

183. Poor customs facilitation has been cited as one of the biggest constraints to trade in Africa. The issues are many and varied but include: systems that are not streamlined and harmonized across countries, multiplicity of documents and procedures that are not standardized, different nomenclatures that are not standardized or harmonized, poor customs practices, corruption and inadequate physical facilities and basic services at border posts.

184. The delays at borders still contribute significantly to the cost of transit traffic flows. It is still estimated in SADC at the border delays cost between US$ 48 to 60 million per year in business revenues forgone. This is excluding the trading and business opportunities missed by those who experience the delays and those who lose interest in even attempting any cross-border operations.

185. As far back as mid-1998, for example, SADC and COMESA countries agreed on a common customs document to facilitate transit traffic modelled on the COMESA Single Administrative Document, or, as it is known, the COMESA CD. In practice, little has happened to translate this agreement into practice, which would have had a far-reaching positive impact on the movement of transit traffic in East and Southern Africa.

Table 10
Typical cross-border movement

EXIT	ENTER	REQUIREMENTS/CHECKS
South Africa (1) Zimbabwe (3) Zambia (5) Tanzania (7)	Zimbabwe (2) Zambia (4) Tanzania (6) Kenya (8)	▪ Customs documentation (1) ▪ Immigration (2) ▪ Insurance (3) ▪ Transit bond (4) ▪ Weigh-bridge checks (5) ▪ Phytosanitary checks (6) ▪ Toll Fees (7) ▪ Other Transit Charges (8) ▪ Security inspections (9) ▪ Traffic checks/Road Blocks (10)

Source: InfraAfrica Consultants

186. Table 10 shows a typical cross-border movement from Southern Africa to East Africa. An export shipment from South Africa to Kenya with a return journey, would involve sixteen border controls and checks. This is excluding other security, traffic and weigh-bridge checks that have to be made en route.

187. This example illustrates why transaction costs in Africa are high and why poor transit facilitation adversely affects the economic competitiveness of these countries. The magnitude of the economic cost of such a cumbersome process can be extrapolated by multiplying this process by the number of transit movements on a daily basis for each truck for say a year. The economic and opportunity cost is staggering.

(f) Border opening hours

188. Operations of international border posts are also affected by seemingly "minor" issues such as border opening hours. In effect, these are not minor issues. Analysis conducted by USAID (Regional Center for Southern Africa) in 1998 showed that the low utilisation of the Trans-Kalahari Highway that links South Africa, Botswana and Namibia was in large part attributed to border opening hours. The fact that the three border posts opened at different times made it difficult for through truck movements. A Tripartite Committee involving the three countries has been established and among the measures it has already implemented is extension of border opening hours. Whereas, in the past, some borders closed at 6:00pm for commercial traffic, they are now open up to 10:00pm. Already this has made a difference to traffic flows on the corridor.

189. Keeping border posts open for longer hours is an additional cost to government in terms of additional staff time. This usually entails recruitment of additional staff or working overtime, not just for customs but also for immigration and other border authorities. Thus, opening border posts longer, although seemingly beneficial, must be weighed against the costs involved. For border posts where there is relatively less commercial traffic, there may not be any justification to open the border posts for longer hours. Clearly, however, there is a case for longer hours of opening of border posts with heavy commercial traffic movements. Border posts can also be opened for longer hours under special circumstances or by mutual agreement between two countries, as happened during the drought of 1992/93 in Southern Africa, when the region's transport systems had to cope with massive movements of drought relief traffic.

(g) One–stop border posts

190. A number of initiatives have been discussed over the years on one-stop border posts, but in practice very little has happened. There has been a lot of talk from both governments and donors on improving corridor efficiency and establishing one-stop border posts, but in practice very little has happened. The measures undertaken thus far include:

- Signing of the Memorandum of Understanding by SADC Governments on the One-Stop Border Post concept
- Establishment of Corridor Planning Committees
- Establishment of Route Management Groups
- Establishment of the Border Post Working Group
- Proposed Joint SATCC/SITCD Project on Modernisation of Customs and Improvement of Trade Facilitation

190. In East Africa, the busiest Corridor is the Northern Transport Corridor. In Southern Africa, the busiest regional transport route is the Durban to Dar-Es-Salaam transport corridor, which traverses South Africa, Zimbabwe, Zambia and Tanzania, with arteries to Malawi through Zambia and Zimbabwe, Democratic Republic of Congo (DRC) through Zambia and Rwanda, and Burundi through the Zambian port of Mpulungu. It therefore makes sense to establish "one-stop-border posts" along this corridor and its arteries, as they carry the bulk of the region's traffic.

192. In this regard, candidate border posts include:

- Messina/Beitbridge (South Africa/Zimbabwe)
- Chirundu (Zimbabwe/Zambia)
- Kasumbalesa (Zambia/DRC)
- Nakonde/Tunduma (Zambia/Tanzania)
- Chipata/Mchinji (Zambia/Malawi)
- Mwanza/Zobue (Malawi/Mozambique)
- Nyamapanda (Mozambique/Zimbabwe)

193. The matter should be of interest to concerned Governments, which the consequent possibility of moving quickly to practical implementation. Considerable progress has been made on the new Witbank-Maputo toll road (part of the Maputo Development Corridor). Facilities have been put in place and final approval is awaited from the Government of Mozambique before commencement of operations of the border post at the Koomartiport/Ressano Garcia border.

(h) Automated customs systems

194. Most countries in Africa have or are adopting the UNCTAD internationally harmonized system ASYCUDA (Automated System of Customs Data Management). Because ASYCUDA is computerized, it entails harmonization, reduction of documents and harmonization of nomenclature. It is therefore seen as the solution to the many problems affecting customs in Africa. However, it must be recognized that ASYCUDA is a technological solution and cannot address all the institutional, administrative and human factors that inhibit the efficient operation of customs in Africa.

195. With new technologies such as e-commerce becoming increasingly important in international trade, Africa is faced with another major problem before while still grappling with the existing paper-based customs systems.

196. This is an area where a lot of work has been done but where a lot more work is needed. The multiplicity of documents and the fact that they are not harmonised across countries leads to considerable delays in the movement of transit traffic and contributes considerably to costs. This is avoidable, provided measures are taken to harmonise documentation and procedures. Automated customs systems such as ASYCUDA were intended to reduce paperwork and lead to harmonisation. In practice, there are few countries in East and Southern Africa where ASYCUDA is fully operational either in individual countries or on corridors. To improve transit facilitation, it is not enough that documents and procedures are harmonised in one country or in some countries, or that some documents are harmonised in some countries. To be effective, all documentation and procedures need to be harmonised across all countries. This is yet to occur in both regions.

(i) Formalising informal trade

197. In both East and Southern Africa, so-called informal trade is a major part of trade and it is growing. Studies have shown that at just one border post between Tanzania and Zambia, informal trade amounted to US$ 20 million in a year. Converted to local currencies, this is a lot of money and points to the fact that informal trade cannot continue to be ignored or wished away by officials, who tend to concentrate on the formal sector.

198. The informal traders are also getting better organised. For example, informal traders in Southern Africa have formed the Cross-Borders' Traders Association (CBTA). The CBTA has its headquarters in Zambia and already has branches in Malawi, Zimbabwe and Tanzania. The aim of the CBTA is to act as a lobby group to further the interests of its members, but also to lobby Governments to correct policies and practices that operate against them. The CBTA also teaches its members their responsibilities and obligations in conducting informal trade. More recently, the CBTA has been active in the HIV/AIDS awareness campaign, because informal traders, by virtuel of their cross-border movements, are more susceptible to the disease and more prone to spreading it.

199. The success stories of the CBTA include:

- Conducting workshops at selected border posts to educate its members and also sensitise border officials on the needs and circumstances of cross-border traders
- Lobbying COMESA to introduce simplified documentation for cross-border traders. As a result of this effort, under the COMESA Free Trade Area (FTA), a "COMESA Simplified Certificate of Origin" for goods whose dutiable value does not exceed US$ 200 has been introduced

200. Clearly, organisations such as the CBTA need support, as they play an important role in creating employment, generating income and helping otherwise marginal communities to have an improved quality of life on a sustainable basis.

(j) Harmonisation of standards and specifications

201. To operate smoothly, standards need to be harmonised along transit transport corridors. Considerable work has been done in this regard particularly in Southern Africa. Standards that have been agreed upon include, vehicle dimensions, road design standards, road signs, axle load limits and train working arrangements.

Other improvements include through cross-border working of trains and single instead of multiple train inspections at border posts. This has led to improved train efficiency and reduced turn-around times for trains.

(k) Overload control

202. Despite bilateral and regional agreements in both East and Southern Africa, overload control is still a prevalent and sensitive issue. It is also one that is surrounded by controversy because it is a "high stakes" issue. It is also one where truckers and Governments accuse each other of wrong-doing. On the one hand, truckers accuse Governments of weak enforcement and corruption by public officials. On the other hand, Governments accuse truckers of deliberately overloading their trucks so as to maximise their returns. It is an issue where both parties may be right to some extent, but whose seriousness cannot be wished away by apportioning blame.

203. In both East and Southern Africa, agreement has been reached on axle load limits, a vehicle overloading control system and the need for more effective policing of overloading, as well as stiffer fines for offenders. In some countries, truckers' associations have worked alongside government agencies to control overloading. In practice, the situation is getting worse rather than better and unfortunately at a high cost to the economies of these countries through massive road damage and higher vehicle operating costs imposed by deteriorating road conditions. In SADC, a package of model legislative provisions (MLP) on overload control, including the management of weigh-bridges by the private sector on a concession basis, has been agreed upon. Implementation has however, been slow.

204. Clearly, the whole area of overload control is an area where partnership between the Governments and the private sector is needed to find common and sustainable solutions. Private-sector-led bodies such as the Federation of Eastern and Southern African Road Transport Associations (FESARTA) can play an important role in this regard. As the name suggests, FESARTA is a grouping of national road associations in East and Southern Africa and is therefore a potentially powerful lobby group.

(l) COMESA Carriers Licence

205. The COMESA Carriers License, which was also introduced in1991, allows a common license issued by one country to be recognized by other participating countries without the need to apply for a license or permit in another country. This saves time and money, but more importantly enables carriers to have back-loads, which facilitates optimum utilization of haulage capacity. However, the licence is not yet in use in all COMESA countries, as not all of them have liberalised their road transport industries. The license is being used in Burundi, Kenya, Malawi, Rwanda, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

206. The COMESA Carriers Licence is in response to the liberalisation/deregulation of the regional trucking industry. It provides for the licencing of carriers engaged in intra-regional transit operations. The licensing requirements are stringent to ensure that only those carriers that meet the criteria are licenced. It enables automatic entry into another country's market for carriers with the licence.

(m) SADC driver's licence

207. A standardised credit card size SADC Driver's Licence has been approved and is now being issued and is in use in most SADC countries. This enables any driver licenced in any one SADC country to drive in any other SADC country. Behind this agreement are standards on driver training and certification, as well as controls on the use of the licence.

(n) Corridor operational coordination

208. Through the Northern Corridor Transit Agreement (NCTA) and the East African Community (EAC), technical and various working groups have been established to address issues affecting transit facilitation along international transport corridors. The same is the case in Southern Africa. Unlike in the past, these groups now comprise public and private sector interests. In Southern Africa, they include the Corridor Planning Committees (CPCs), Route Management Groups (RMGs) and other bilateral and multilateral arrangements.

209. Railways in Southern Africa have established working groups to facilitate better planning and utilisation of the region's railway systems. These include Corridor Planning Groups (CPGs), Corridor Management Groups (CMGs) and other Specialist Committees. A major weakness of these groups is that their role is advisory in nature. At best they can exert pressure for certain measures to be adopted, but in practice, they cannot compel or enforce compliance. Thus, their effectiveness requires goodwill by parties and governments concerned.

(o) Public/private sector dialogue

210. Some of the corridor operational coordination mechanisms outlined above include private sector participation. This ensures that the concerns of consumers as end users are taken into account in the planning process.

211. The structure of SATCC has a number of regionally constituted sectoral committees in ports and shipping, railways, roads and road transport, civil aviation and other sectors. Private sector trade and industry associations have now been invited to participate in the deliberations of these committees. This is a fundamental shift from the practice a few years ago when these committees were closed shops for Governments or government-owned entities only. This shift has fostered public/private sector dialogue and ensured that private sector views are factored into the regional policy formulation process.

XV. NEW INITIATIVES AND APPROACHES

A. General

212. Development Corridors and Spatial Development Initiatives (SDIs) are a new concept that is taking root in Southern Africa, including Tanzania. They place transport in general and transit transport in particular in the broader socio-economic context. The basic premise of this concept is to view economic activity, including transport, in a holistic manner. It recognises the interdependence of sectors. For example, tourism or agriculture or mining cannot flourish without an adequate infrastructure system, and in turn an infrastructure system is there to serve the needs

of other economic sectors, activities or projects as well. The objectives and strategies around development corridors and SDIs are given below.[15]

213. The basic objectives of Development Corridors and SDIs include the following:

1. **Generate economic growth and reduce poverty:** foster increased levels of economic activity through the promotion of intra-regional and international trade, as well as employment creation, thereby generating incomes and reducing poverty;

2. **Promote private sector participation:** increased private sector participation and investment in economic activities, including transport, through availability of increased opportunities and promotion of cross-border investments;

3. **Develop transport:** develop adequate transport and communications systems to open up the corridors and SDIs and make them attractive for investment;

4. **Improve transit transport:** reduce the cost of imports, while at the same time increasing the potential competitiveness of exports to be routed via the corridors to overseas markets;

5. **Add value to production:** identify and operationalise opportunities that arise from the processing/beneficiation of minerals, agricultural produce, forestry products, etc;

6. **Promote tourism:** provide access to and promote tourism on an integrated regional basis;

7. **Promote sustainable development:** generate long-term and sustainable regional and national economic growth and employment;

8. **Promote complementarities:** promote greater complementarities in economic strategies and activities between and among countries through the creation of a larger economic space and economies of scale;

9. **Enhance comparative advantage:** promote more equitable spatial location of industries within Southern Africa based on inherent development potential and comparative advantages and not narrow national considerations;

10. **Correct trade imbalances:** enhance intra-regional trade and begin to correct the large trade imbalances, particularly between South Africa and the rest of the region;

11. **Mobilise investment:** mobilise increased flows of foreign direct investment (FDI) on a collective rather than a competitive basis.

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[15] Adapted by InfraAfrica Consultants from – An Overview of the Southern African Regional Developmen t Corridors. Southern Africa Transport and Communications Commission (Proceedings of the SADC Transport Investment Forum, Windhoek, Namibia, 24-26 April, 2001)

214. The successful exploitation of the opportunities that arise from development corridors and SDIs depends on availability of efficient transport. Thus the re-establishment, upgrading and modernisation of port, road, rail and telecommunications infrastructure is fundamental to the effective and efficient functioning of each of the corridors as transport routes and as economic development corridors.

B. Strategies

215. Strategies to exploit development corridors and SDIs include the following:

1. **Mobilising private sector investment:** mobilising private sector investors to partner the public sector in the rehabilitation, operation and maintenance of infrastructure;

2. **Mobilising private sector involvement:** identifying opportunities that are suited particularly for exploitation by the local and regional private sector, involving projects ranging from small-scale to medium-and large-scale, as well as the informal sector;

3. **Identifying economic opportunities:** identifying economic development opportunities that could be sustainably developed (economically, financially and environmentally) as a means of increasing the development momentum in and around the corridors and SDIs;

4. **Promoting viable partnerships:** identifying opportunities for the creation of viable and sustainable partnerships between foreign, regional and local investors, the local community and the informal sector and encouraging cross-border investments;

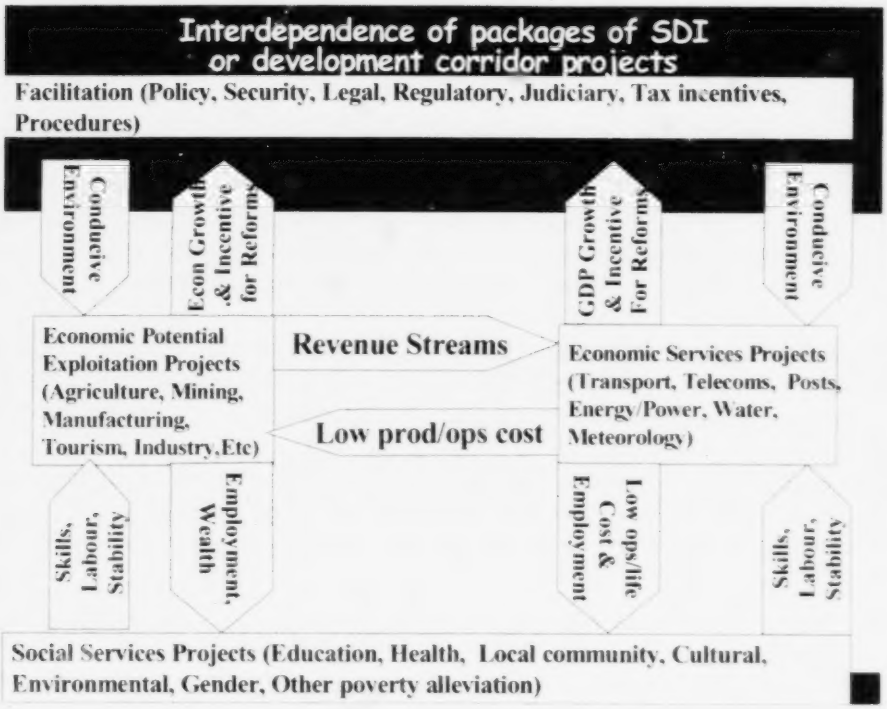
5. **Promoting local beneficiation:** promoting local beneficiation of resources based on a variety of extractive industries so as to add value to the production process and help diversify the economic base;

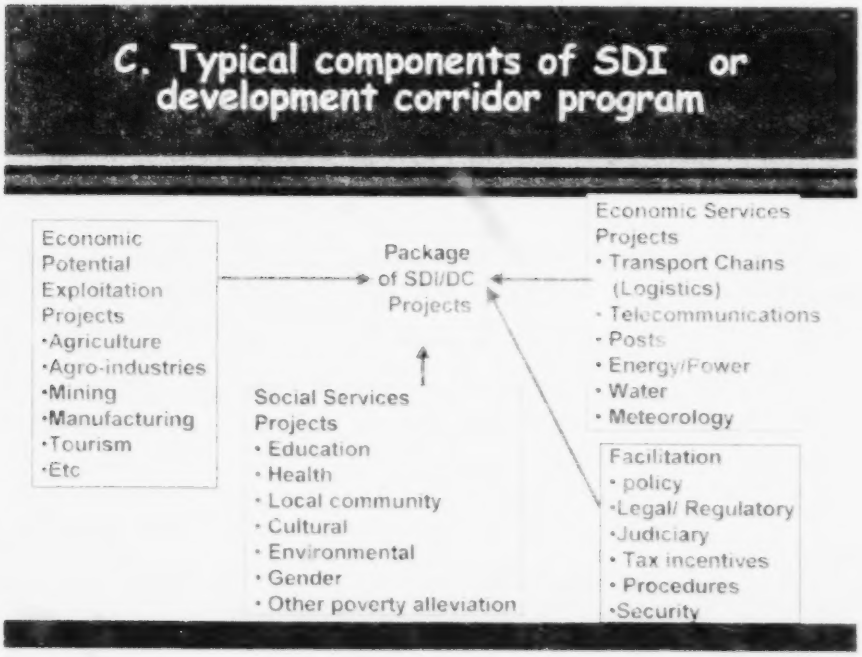
6. **Promoting linkages:** promoting forward and backward linkages with major population centres and areas of economic activity;

7. **Creating an enabling environment:** promoting the establishment of an enabling investment environment conducive to attracting investment on a sustainable basis

(d) Components of Development Corridors and SDIs

Source:InfraAfrica Consultants


Interdependence of packages of SDI or development corridor projects
Facilitation (Policy, Security, Legal, Regulatory, Judiciary, Tax incentives, Procedures)
Conducive Environment
Econ Growth & Incentive for Reforms
GDP Growth & Incentive For Reforms
Conducive Environment
Economic Potential Exploitation Projects (Agriculture, Mining, Manufacturing, Tourism, Industry,Etc)
Revenue Streams
Low prod/ops cost
Economic Services Projects (Transport, Telecoms, Posts, Energy/Power, Water, Meteorology)
Skills, Labour, Stability
Employment, Wealth
Low ops/life Cost & Employment
Skills, Labour, Stability
Social Services Projects (Education, Health, Local community, Cultural, Environmental, Gender, Other poverty alleviation)



C. Critical success factors

216. Consistent with the lessons of best practice that have been derived thus far from the implementation of the SDI programme, the following key principles and strategies are to underpin the Regional Development Corridor and SDI Programme. Critical factors to the success of the Development Corridors and SDI initiatives include the following:[16]

1. **Political Commitment:** by nature, Development Corridors and SDIs traverse more than one country. The first step, therefore, to successful development and implementation is to have the political will and buy-in at the highest levels, preferably Heads of State. This ensures high priority in the national development plans, as well as the necessary regional and international profile;

2. **Institutional and Legal Framework:** once political buy-in has been obtained, the next important step is to establish the necessary institutional and legal structures to underpin the cooperation. Usually this is through a Memorandum of Understanding (MOU);

3. **Operational Agreements:** Once the MOU has been defined, it is critical that a clear framework is established in terms of management, coordination and operation arrangements. This is often through a Corridor Body of Authority such as the Maputo Development Corridor Authority. This is usually an autonomous entity set up jointly by the concerned Governments and given the mandate to wholly manage the Development Corridor or SDI;

4. **Public/Private Partnership:** from the onset, the development must be underpinned by strong public/private partnership. The private sector is more likely to expedite developments than Governments. Often, it is the private sector that pushes the Governments to put in place the necessary frameworks and undertake the necessary reforms, including provision of incentives. A large part of the reason for the success of the Maputo Development Corridor is that once the basic government cooperation frameworks were put in place, the private sector took the lead in identifying projects and in investment mobilization;

5. **Investment Mobilisation:** the sheer size and scope of these developments means that massive resources need to be mobilised for the various projects. Investment mobilisation through consortia, cross-border partnerships, investment promotion ventures and related initiatives become a major part of the success of the Corridor;

6. **Anchor Projects:** there should be a few "anchor projects" that form the "cornerstone" of the Corridor or the SDI. In the case of the Maputo Development Corridor, anchor projects included the US$1.2 billion Mozal Aluminium plant, the Witbank Maputo Toll Road and others. Anchor projects give rise to economies of scale and spur the development of "feeder" projects. For example, the upgrading of the Maputo port and the power projects were necessitated by the Mozal Aluminium Plant;

7. **Transparent Procurement:** a conducive macro-economic environment is obviously a pre-requisite to attracting investment, particularly FDI. Over and above this, international investors need assurance that the tendering processes for the various projects will be open and transparent. Perceptions of corruption can drive away investors and render the whole Corridor or SDI untenable;

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[16] Compiled by InfraAfrica Consultants from lessons drawn from the Corridor experience in Southern Africa thus far.

8. Expedited Implementation: a good project can sometimes be stalled because of long and cumbersome negotiating processes. It is important that once interest is obtained from potential investors and the procurement process completed, negotiations should be brought to closure expeditiously.

D. Selected regional development corridors and SDIs

217. The Southern African Corridors have developed over a long period of time and today provide the backbone for intra-regional and international trade between and for the SADC countries. They provide the connection between the regional centres of economic activity, as well as the link to and from the regional ports that handle all exports and imports with the rest of the world. As such, they are the 'lifelines' of the continental SADC economies, and their cost effectiveness, efficiency and reliability determine to a great extent the current and future international competitiveness of the region.

218. These corridors carry the bulk of long distance traffic within SADC and represent essential transport axes for export and import trade, both within SADC and between SADC and the rest of the world, including the rest of Africa. It has been estimated[17] that if one excludes the movement of coal and iron ore, which use dedicated rail lines, these corridors are used for the movement of between 45% and 53% of SADC imports and exports with the rest of the world, and are also vital (54%) for intra-SADC traffic. It is exactly because of the strategic role of these corridors that (bearing in mind that transport within SADC is generally inadequate and less efficient than in many regions of the world) the development of the existing main transport corridors into more efficient and effective routes has attracted considerable political interest amongst the member States.

219. The regional development corridors/SDI's are listed below:

Maputo Development Corridor *(South Africa and Mozambique)*
Nacala Development Corridor *(Malawi and Mozambique)*
Beira Development Corridor *(Zimbabwe and Mozambique)*
Zambezi Valley SDI *(Mozambique, Zimbabwe and Malawi)*
Coast to Coast SDI *(Namibia, Botswana, South Africa, Swaziland and Mozambique)*
Walvis Bay Development Corridor *(Namibia, Botswana)*
Trans-Caprivi Corridor *(Namibi and Zambia)*
Mtwara Development Corridor *(Tanzania, Malawi and Zambia)*
Tazara Development Corridor *(Zambia and Tanzania)*
Gariep SDI *(South Africa and Namibia)*
Okavango Upper Zambezi SDI *(Zimbabwe, Botswana, Angola, Namibia and Zambia)*
Lubumbo SDI *(Mozambique, South Africa and Swaziland)*
Swaziland Tourism and Biodiversity Corridor *(South Africa, Swaziland & Mozambique)*

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[17] Transport Corridor Agenda – World Bank/Southern Africa Transport and Communications Commission , July 2000

Lobito Development Corridor *Angola, Zambia and DRC)*

Malange Development Corridor *(Angola and DRC)*

Namibe Development Corridor *(Angola and Zambia)*

E. SADC transport corridors: corridor definitions

220. A selection of some[18] of these regional development corridors is briefly described below, and a very preliminary indication of the existing and/or potential sectors for project investment is also provided. In this regard, it is important to note that the degree of progress made with the implementation of these Development Corridors and/or SDIs differs widely. Some are fairly mature (such as the Maputo Development Corridor) and have already seen very significant private and public sector investment, as well as employment creation. The development of others, such as the Nacala and Tazara Corridors, is still in the early stages of planning and project conceptualization.

221. The general principle is to view the major transport routes from the maritime ports to the hinterlands that they serve not merely as transport but also as economic corridors with activities related to agriculture, industry, commerce, communications, tourism and other industries. Thus, the corridors would serve as growth points, not just for large industries, but also for emerging small-scale industries.

222. Three Development Corridors and one SDI are given as examples below. These are:

- The Maputo Development Corridor (MDC)
- The Coast to Coast (Coast 2 Coast) Development Corridor
- The TAZARA Development Corridor and
- The Lubombo Spatial Development Initiative (Lubombo SDI)

1. Maputo development corridor

223. The largest and most advanced Development Corridor to date is the Maputo Development Corridor which links South Africa's industrial heartland of Gauteng with the Mozambican port of Maputo. This corridor is being developed with the private sector in the forefront.

224. The initiative focuses on rehabilitation and upgrading of the traditional trade and transport links as a basis for broad economic development of the Corridor area. It relies strongly on private sector participation and includes as core elements the upgrading/construction of a toll road linking Johannesburg in South Africa to Maputo in Mozambique and the improvement of rail and port operations in Mozambique to re-establish competitiveness of the transport route.

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[18] *A more comprehensive and detailed overview of each of the Development Corridors and SDIs can be found on the SATCC website:* www.satcc.org *as part of the proceedings of the SADC Transport Investment Forum, April, 2001*

225. The vision of the initiative is to achieve accelerated rehabilitation of the core transport infrastructure through public/private partnerships, thereby opening up under utilised economic opportunities. Underlying this vision is the desire to see this initiative contribute to other key policy areas, notably regional economic integration, international competitiveness, and a broadening of the ownership base in the economy of the corridor.

226. The Maputo Development Corridor is an example of what can be achieved through partnership between the public and private sector, political will, and commercial demand for services to be provided. Started in August 1995, the corridor involves upgrading road and rail links between South Africa and Mozambique and dredging of the port of Maputo.

Following conception, an investor conference was held in May 1996. Major components of the corridor include:

- Upgrading of the Witbank–Maputo toll road at a cost of $400 million under a 30 year concession to a consortium called Trans African Concessions;
- Rehabilitation of Maputo port at a cost of $85 million;
- Rehabilitation of the Southern Mozambique railway network;
- Upgrading of the Ressano-Garcia border post and its operation as a "one-stop border post" on a build operate and transfer (BOT) basis. A Government-to-Government agreement has been concluded to facilitate operation of such a border system.

227. The corridor has spurred other developments such as the Mepanda-Unca hydro-electric project on the Zambezi river, developed at a cost of $200 million to supply electricity to Mozambique. Another is the joint venture effort involving the electricity utilities of Mozambique, Swaziland and South Africa to supply power to the new Mozal aluminium plant in Mozambique through the construction of two 440 Kv lines at an estimated cost of $105 million. The Mozal Aluminium Smelter plant is a huge investment valued at $1.3 billion.

227. In total, the Maputo Corridor has 180 projects at an estimated cost of $7 billion. Already, $ 2 billion has been committed, with 8,000 new jobs created. There are numerous spin-offs to both the formal and the informal sector, resulting in increased incomes. The corridor is considered a model for other development corridors in the region. The fact that the project has been able to move so quickly from conceptualization to actualization is testimony to the momentum of private-sector-driven projects and political commitment at the highest level.

2. Coast to coast development corridor

229. The Coast to Coast (C2C) SDI is a regional initiative between the participating countries of Mozambique, Swaziland, South Africa, Botswana and Namibia. The SDI stretches approximately 3,000 kilometres from Maputo in Mozambique (on the Eastern Seaboard and Indian Ocean) through the north of Swaziland, the Mpumalanga, Gauteng and the North West Provinces of South Africa, Botswana, and through to Walvis Bay in Namibia (on the Western Seaboard on the Atlantic Ocean).

230. The route connects some of Southern Africa's most economically, and financially important cities and towns Maputo, Nelspruit, Witbank, Middleburg, Pretoria, Rustenburg, Lobatse, Windhoek and Walvis Bay, while urban areas of Gaborone, Mbabane and Manzini are also functionally integral parts of this corridor economy. Collectively, these cities account for a huge proportion of the existing Southern African economy, and the resource base on which they are located still has tremendous further growth and development potential. These cities are also amongst southern Africa's largest and fastest growing urban populations, and this urbanisation process, whilst creating a number of development challenges, also offers good opportunities for further economic development and employment creation in the primary, secondary and tertiary sectors.

231. The planning area for the C2C overlaps with that of the Maputo Development Corridor, the Tourism and Biodiversity Corridor involving Mozambique, Swaziland and South Africa, and the Walvis Bay Development Corridor. In common with the above-mentioned development corridors, this initiative is concerned with the efficient and effective movement of goods and services across the sub-continent and/or between any two points along the route. A particular objective was to investigate the extent to which the existing road route across the sub-continent could be used as a basis for developing a Trans Africa Tourism Highway along similar lines to tourism routes developed in the USA and elsewhere. Strategies particular to the trans-continental tourism route included:

- Combining the differing tourism resources along the route of the corridor (differing environments, cultures, scenery, architectures, history, heritage, wildlife, etc.) to develop an extremely diversified tourism experience incorporating nature-based, adventure, and cultural tourism products and experiences;
- Promoting a regional approach to the marketing, management and development of tourism infrastructure and facilities.

232. The route is characterised by significant existing economic activity and under-utilised economic development potential. The extensive, unutilised natural resource base of Mozambique presents further important development and growth opportunities for tourism, forestry, fisheries and agriculture development, as well as in terms of related downstream processing. Swaziland is functionally an integral part of the Maputo Development Corridor and the Coast to Coast SDI.

233. The route follows the Maputo Development Corridor through Mpumalanga Province of South Africa with its high concentration of economic activity, high economic growth rates, and considerable further development potential, particularly in the manufacturing sector and in terms of value-adding processing based on this areas abundant natural resources.

234. Botswana's economy has shown strong growth over the past three decades. Dominant activities include the mining industry (diamonds, copper-nickel, soda ash and coal) and agriculture (predominantly cattle ranching and beef processing) development. Future growth potential is to be found in minerals processing, manufacturing, tourism and other services industries.

235. The productive capacity of the Namibian economy is also concentrated in primary sect activities – mining, large-scale commercial livestock farming and fishing, as well as in the services industry. The manufacturing base remains small, and meat and fish processing are the largest sub-sectors. Processing of local raw materials for both domestic consumption and export is the predominant industrial activity.

Walvis Bay can potentially offer investors important locational advantages - providing access to both the South African Customs Union (particularly Gauteng), as well as Botswana, Zambia, Zimbabwe and DRC, and quicker access to European Union Markets (through Lome) and North American markets.

236. The road condition of the Coast to Coast Corridor is generally in fair to very good condition, and there are basically no on the movement of heavy goods vehicles, buses or light vehicles. There are, however, sections where some constraints are experienced in urban areas and some sections of the road itself that require rehabilitation due to geometrical, pavement and/or safety considerations.

3. TAZARA development corridor

237. Just as the Coast to Coast Corridor links the east and West African coasts, the TAZARA Corridor links East Africa to Southern African. It links the port of Dar-Es-Salaam in Tanzania to the port of Durban in South Africa. Thus, the TAZARA Development Corridor is a strategic artery, as it links Southern Africa with East Africa and Central Africa as well as the Great lakes area comprising the countries of Burundi, Rwanda and eastern Zaire. There is increasing traffic on this route from two directions: the south from South Africa, Zimbabwe and Zambia, and north, from the Malawi Northern Corridor. The traffic involves largely sugar, cement, fuel and machinery.

238. The Governments of Tanzania and Zambia have agreed in principle to develop this Corridor. This should be easier because the two countries have a long history of cooperation and collaboration. As an example, the railwayline that links Zambia to Tanzania, the Tanzania-Zambia Railway Authority (TAZARA), is jointly owned by the two Governments. The TAZAMA pipeline was also jointly owned, and there was close collaboration in the construction of the TANZAM Highway, the major international road link between the two countries. With such precedents and their long history of cooperation, the two Governments should move fairly quickly to establish cooperation modalities with respect to the TAZARA Development Corridor.

239. In Tanzania, the National Development Corporation (NDC) has been given the responsibility of coordinating the development of Corridors and SDIs in Tanzania. Other Development Corridors that are emerging in Tanzania include Mtwara and Rovuma. Zambia is taking steps to set up an SDI Unit in the Ministry of Commerce, Trade and Industry, which will work closely with the Planning Unit of the Ministry of Communications and Transport. The proposed SDI Unit will look not only at the TAZARA Corridor, but at other Corridors such as Beira, Nacala, Trans-Caprivi and Walvis Bay that Zambia is already involved in, as well as others that are likely to emerge, such as those to link Zambia to Angola and the Democratic Republic of Congo.

240. The TAZARA Development Corridor traverses some of the most fertile land in northern Zambia and southern Tanzania. The area and its proximity has a large potential for agriculture, tourism, mining, forestry and fishing. The aim is to develop this Corridor as a south-east growth point, as it is the belt that links Southern to East Africa.

241. Specific corridor projects are yet to be defined, but these would include infrastructure projects in rail, roads, port development, shipping services, tourism, agriculture, fishing, forestry and mining. Infrastructure on the corridor comprises the following:

- Road link from the south (South Africa, Zimbabwe, Zambia) to the port of Mpulungu on Lake Tanganyika, where goods are transhipped to lake vessels for onward conveyance to Rwanda, Burundi and eastern Zaire;

- Road link from the south right through to Dar-Es-Salaam in Tanzania via the Beitbridge, Chirundu, Lusaka, New Kapiri-Mposhi, Nakonde, Mbeya, Iringa, Morogoro. This is one the busiest and major arteries of the SADC Regional Trunk Road Network (RTRN);

- Rail link from the south (South Africa, Zimbabwe and Zambia) all the way to Tanzania through the rail systems of Spoornet, Beitbridge-Bulawayo Railway (BBR) or National Railways of Zimbabwe (NRZ), Zambia Railways (ZRL) and TAZARA. It is possible to run trains all the way from the port of Durban in South Africa to the port of Dar-Es-Salaam in Tanzania. Contrary to popular belief, the TAZARA railway has the same 1.067m gauge as the rest of the railways in the SADC region. The exception is the East African railway system, which as a gauge of 1.00m. A transhipment facility has been built at Kidatu in Tanzania by a company called TransAfrica Railway Corporation. This facility allows quick transhipment from the southern to the east African railway system;

- Rail link from the south to the Zambian provincial town of Kasama, where goods are transhipped on to road up to the port of Mpulungu.

242. Proposed infrastructure projects on the TAZARA Corridor include:

- Construction of a rail link to connect the port of Mpulungu to an all rail link through the TAZARA railway system at a location called Nseluka. This would avoid he current transhipment from road to rail at Kasama;

- Upgrading the port of Mpulungu on Lake Tanganyika into a regional port, including construction of storage facilities. There are discussions on the possible concession of the port to the private sector;

- Improving shipping services for both passenger and freight on Lake Tanganyika to cater for increased traffic to Rwanda, Burundi and eastern Zaire;

- Possible concession of the TAZARA railway, currently under discussion between the two Governments of Zambia and Tanzania;

- Construction of the Isoka-Muyombe-Chama road to provide a reliable road link between the Malawi Northern Corridor and the TAZARA Corridor.

4. Spatial development initiatives – Lubombo SDI

243. A related concept is that of Spatial Development Initiatives (SDI). The SDI is a wider concept that involves not just transport but other economic sectors such as tourism, agriculture, manufacturing and services and consequently encompasses a wider geographical area than a Development Corridor, which tends to be specific to a transportation route.

244. An example is the Lubombo SDI which adjourns the Maputo Corridor. This initiative involves Swaziland, Mozambique and South Africa. The geographical area targeted by this initiative is broadly defined as eastern Swaziland, the southern part of Mozambique's Maputo Province and the north-eastern areas of KwaZulu Natal in South Africa. The Lubombo region has six major inter-locking ecosystems. The area is known internationally for the diversity of its plant life, its game and some of the most extensive unspoiled coastline on the eastern seaboard of Africa with abundant aquatic life.

245. The main natural and cultural resources found within the Lubombo area include:

- Pristine beaches and an Indian Ocean coastline where one can easily view dolphins, humpbacked whales and endangered turtles;
- The southernmost coral reefs along the African coastline, replete with many species of tropical fish;
- Coastal Lakes such as lake Sibayi, Kosi Bay and Lake St Lucia that have such a high biodiversity of plant and animal species that they have been recognised as wetlands of international importance under the Ramsar Convention. The St Lucia Wetland park has been accorded World Heritage Site status;
- Ten major game reserves or national parks in Swaziland, Mozambique and South Africa that are home to the Big Five;
- Some of the most varied bird life in Southern Africa;
- A range of archaeological sites. The Border Cave on the ridge of the Lubombo mountains has particular significance for the study of early man;
- The culture and lifestyles of the Swazi, Zulu, Thonga and Shangaan peoples, who have lived and interacted with each other in the area for centuries.

246. This mix of assets has the potential to stimulate internationally competitive tourism and agricultural development within the area. However, the inadequacy of the infrastructure, particularly the road infrastructure, has had a major inhibiting effect on tourism and agricultural-led development in the area.

247. The climate and soils in the Lubombo area also combine to provide an excellent environment for livestock and crop production. The area is already characterised by a thriving sugar and forestry industry including many successful examples of irrigated and dry-land sugar production, commercial plantations of pine and eucalyptus, citrus fruits, dry-land pineapple production, cotton cultivation, mango and banana plantations, extensive beef production and widespread subsistence agriculture. This SDI has focused its efforts on supporting the agricultural sector through the provision of strategic infrastructure and by encouraging cross border cooperation, exports and marketing. Agricultural planning and tourism-related planning are also integrated to avoid potential conflicts.

248. The key objectives of this initiative are consistent with those described above. Special emphasis was placed by the Governments on unblocking obstacles to growth. This included the creation of a stable investment environment, secure land tenure, efficient movement through borders and customs, maximum government support, supporting the use and establishment of public-private partnerships and encouragement of linkages between tourism and other sectors such as agriculture, services, cultural tourism, agri-businesses, building and construction, light manufacturing and crafts production. The development of the necessary new roads and/or the rehabilitation of others to facilitate far easier access into and out of the area for both tourism and agricultural activities is viewed as critical to the success of the whole SDI.

XVI. RECOMMENDATIONS

- Accord due priority and importance to transit transport in the integration agenda of the various regional groupings and address transit transport on an integrated basis as a regional and not a national issue.

- Promote coordination of efforts and rationalization of transit transport initiatives across the three regional bodies in the two regions, namely EAC, COMESA and SADC, so as to encourage policies and practices that enhance transit transport and avoid duplication and overlap.

- Improve coordination among regional organisations, donors and Governments through the establishment of Transit Corridor Coordinating Committees (TCCCs) so as to promote an integrated and coordinated approach to addressing transit transport issues and constraints.

- Strengthen the capacity of key national institutions such as core ministries of transport so that they can play an effective role in promoting and spearheading policy reforms, as well as in the overall management of the transit transport systems.

- Develop systems and mechanisms for effective benchmarking and impact assessment of the performance of transit transport corridors, including monitoring progress in the implementation of various agreed measures. Facilitate implementation by developing an action plan supported by detailed implementation guidelines or "road maps" to provide specific guidelines to countries so as to improve their implementation record.

- Put in place policies that promote liberalization through continuation of reforms, concessions and privatization so as to move away from monopoly to market-based competitive provision of transit transport services.

- Formalize informal trade by giving it due recognition in policies and practices and by introducing measures, documentation and procedures that give legitimacy to and promote informal trade.

- Promote compliance which international conventions, multilateral and bilateral agreements intended to enhance cooperation between landlocked countries and their neighbours to enhance transit transport facilitation and efficiency.

- Ensure that legal frameworks, regulations and practices are harmonized across countries and that they are compatible with agreed protocols, agreements, measures and frameworks at regional level.

- Review and harmonize transit systems and procedures, customs laws, regulations and trade policies existing in member States and promote enhanced compliance with agreed measures through improved monitoring, analysis, information availability and education.

- Develop a system and mechanisms for effective benchmarking and monitoring of the region's international transport corridors so as to better target interventions to improve performance and efficiency. This should be in the form of a dynamic "transport demand model".

- Promote expedited implementation of the following measures that are already in the process of implementation by ensuring coordination, complementarity and compliance:

    - Harmonized road transit charges
    - Regional Customs Bond Guarantee (RCBG)
    - Third Party Motor Vehicle Insurance Scheme – Yellow-Card
    - COMESA Customs Document (COMESA CD)
    - Automated electronic customs systems including ASYCUDA
    - Opening hours for international border posts
    - COMESA Carriers Licence
    - SADC Driver's Licence
    - MOU on one-stop-border posts
    - Harmonized axle load limits.

- Review organisation structures of customs administrations and determine modern management systems and structures. Adopt the agreed recommended modern management systems and structures.

- Prepare and organise regional workshop of customs, trade and clearing and forwarding computer experts to determine automation policy and computer systems compatibility.

- Establish national and regional customs information computer network and communications systems linking all stakeholders.

- Establish forums for stakeholder consultations, publicity and public relations programmes.

- Develop training facilities for customs, trade officials, clearing and forwarding officials and others at national and regional level, and make them operational.

- Establish regional management development for a share and exchange information and cooperate in programmes and implementing of regional training programmes.

- Establish and implement comprehensive HRD policies for improving working conditions for public servants performing facilitation services (recruitment, induction, motivation etc.).

- Implement staff exchange programmes and liaison with international organisations such as WCO.

- Prepare for and organise workshops/seminars and public relations campaigns at national and regional levels for customs, trade, clearing and forwarding and other service providers.

- Establish a regional common code of conduct for customs officials and related service providers.

- Establish a regional monitoring and enforcement capacity for the code of conduct and control mechanisms for customs officials and related service providers.

❑ ***National and regional customs databases***

- Establish an institutionalized communication strategy and system in order to create an efficient, effective and formalised mechanism for communicating relevant information on issues of interest to regional and international cooperation. This should involve Governments, customs administrations and other stakeholders.

- Design an information database which should outline the type and nature of information to be exchanged such as information to be automatically exchanged as a matter of routine; information to be provided on request; and sensitive information which requires special procedures before it can be exchanged.

- Improve effective accessibility by all customs, trade and other stakeholders to telephone, fax and e-mail facilities.

- Establish a regular consultative mechanism with all relevant stakeholders such as government agencies, including Ministries of Trade, Health, Agriculture, Industry etc; other authorities at border posts; and the business community, especially traders and manufacturers.

- Establish a mechanism to publicize all customs matters through the media, brochures and electronic media and set up public relations system.

- Establish a regional and international compatible computer network and create a centralized customer computer servers where the customs administration can rent computer space.

❑ ***Harmonising and streamlining Customs and transit documents***

- Prepare a final documentation format (SADC/COMESA-CD), implementation manual and action plan.
- Organise a regional workshop to adopt the document format, manual and action plan.
- Print and distribute documents for use.
- Prepare and conducte regional training of trainers programme (three per country - customs, clearing & forwarding and trade)
- Training and overseeing implementation on the ground.

❑ ***Harmonisation and standardisation of customs and transit procedures***

- Review existing procedures in member States and recommend improved and harmonised procedures, implementation manual and action plan.
- Organise a regional workshop to discuss and adopt the recommendations.
- Implement adopted recommendations.

❑ ***Goods origin verification procedures***

- Review rules of origin and formulate regulations and guidelines on practical application of the rules.
- Establish unit to deal with authentication of rules of origin.
- Adopt the agreed common policy and interpretation of rules of origin and exchange specimen signatures and stamps of officers authenticating the rules of origin.
- Establish a centralised data base on rules of origin in member States (to assist in investigation of origin fraud).
- Communicate and exchange origin intelligence information effectively among member States.

❑ ***Harmonised and coordinated security and safety systems***

- Draft proposals for collaborative security coordination to cater for the transit goods in the region.
- Organize workshop involving, among others, customs administration service providers, trade ministries, business community and security organs.
- Adopt and implement the security measures.
- Establish intelligence information data banks and a system of sharing and exchange of such information at regional level.
- Improve the performance of international transport corridors by promoting harmonised and integrated transport operations across the region and introducing technological solutions based on information technology in order to improve overall transport efficiency and reduce costs.
- Introduce electronic and information-based technological solutions to improve transport efficiency along international transport corridors.
- Design and establish a web-based data base of transit requirements (transit charges, documentation required en-route, customs documentation and procedures, axle load limits, border post opening hours, information on facilities along the route such as fuel stops, facilities, restaurants, etc, including road conditions).

- Consider having the data base operated by industry associations such as FESARTA.

❑ **Introduce harmonized and streamlined systems of transit charges**

- Review data input and methodology for calculating transit road user charges with a view to updating them. This should be done jointly with SADC, COMESA, SACU and EAC.
- Review and determine the most suitable charging and revenue collection system.
- Prepare manual for implementation.
- Facilitate implementation along specific corridors.

❑ **Harmonize axle load limits and effective overload control**

- Review approved axle load and gross vehicle mass limits and secure full agreement on what to adopt in harmony among all countries.
- Secure adoption of SADC model legislative provisions related to method to be adopted and management of weigh-bridges on the basis of a well defined contract.
- Prepare an implementation manual and timetable and facilitate implementation on specific borders.
- Promote road safety through education and improved maintenance of road infrastructure for international transit transport so as to safeguard life and property, as well as security of goods in transit.
- Intensify measures to raise awareness and educate users of transit transport systems, particularly HGV drivers and populations living along the corridors and border posts, on the dangers of HIV/AIDS so as to curb the spread of the disease and its adverse effects.
- Undertake effective and concerted marketing of investment opportunities available in the region in transport, development corridors and special development initiatives (SDIs) so as to increase investment flows and private sector participation.
- Improve transit facilities along the major transit transport corridors in both Southern and East Africa.
    - Truck stops en route to facilitate rest and recuperation for drivers.
    - Workshops to enable emergency repairs to be undertaken.
    - Facilities at border posts such as parking, accommodation, restaurants, money bureaus, communication facilities and related facilities.
    - Integrated information systems.

❑ **Establish "one-stop-border post" facilities**

- Draft model legislation or MoU governing the development, management and operation of joint border facilities.
- Organize a workshop/seminar involving all stakeholders to discuss the MoU with a view to agreeing upon the final version.
- Adopt and implement the MoU.

❑ **Investment in and construction of joint border facilities**

- Organize a regional border investment forum involving local, regional and international investors.

- Promote investment in one-stop border posts, including inland clearing depots or inland dry ports.
- Encourage the private sector to provide essential services and facilities such as banking, communication, hotels and restaurants along transport corridors and at border posts.
- Strengthen existing development corridors and SDIs and accelerate the establishment of new ones using successful models from other corridors and promote the establishment of development corridors and SDIs in East Africa.
- Revitalize and strengthen Corridor Committees and other public/private consultative mechanism on transport corridors where they exist, establish them where they are not in place and facilitate informed dialogue and a practical approach to addressing transit transport constraints on the corridors.

❑ **Improve networking and information sharing**

- Enhance the regional knowledge base on transport through increased networking, information sharing and skills development.
- Improve dialogue, networking and information sharing by establishing linkages with other regions of Africa and internationally.
- Developing dedicated websites and related mechanisms for purposes of marketing and information dissemination.

❑ **Establish consultative mechanisms among stakeholders nationally and regionally**

- Draft a Memorandum of Understanding (MoU) on mutual cooperation among customs administration and other service providers on collaborative operational procedures, joint operations, training and extraterritorial assignments, customs personnel exchange, security and safety matters, inspection, etc.
- Prepare and organize a workshop/seminar involving all stakeholders in order to enhance various forms of cooperation on customs administration.
- Adopt and implement the MoU.
- Prepare and organize a consultative forum to share information and collaboratively tackle problems established at operational centres (border points), national customs headquarters and regional levels.
- Implement the adopted recommendations emanating from the consultative forum.

❑ **Improve public/private sector dialogue and learn from best practices**

- Implement capacity building in both Governments and their regulatory agencies and the private sector.
- Encourage and assist formation or strengthening of national and subregional private sector associations.
- Establish or strengthen an agreed institutional framework for such dialogue.